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### **ACOUSTICAL ANALYSIS REPORT**

Casa de Verde Apartments 1121 Greenfield Drive El Cajon, California 92021 APN: 484-101-08

County of San Diego Case Numbers: R06-012; S06-036; ER 06-14-038

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DEPARTMENT OF PLANKING AND LAYERUSE

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# 1.0 EXECUTIVE SUMMARY

The proposed project, known as Casa de Verde Apartments, consists of the construction of one new 2-story building containing 13 apartment units, including an on-site Manager's studio. The project will also include 6 private yards, 4 private decks and a community court yard. The project site is located at 1121 Greenfield Drive in El Cajon, County of San Diego, California.

The primary noise source in the vicinity of the project site includes traffic noise from Greenfield Drive and 1<sup>st</sup> Street. The current calculated on-site noise level at the northern property line is 67.4 Community Noise Equivalent Level (CNEL). Due to an increase in future traffic volumes on Greenfield Drive and 1<sup>st</sup> Street, the future (year 2030) noise level at the same location is expected to increase to 67.6 CNEL.

The County of San Diego Noise Element states that exterior noise levels shall not exceed 60 CNEL at residential outdoor usable. Calculations show that while a large part of the property on the northern side of the site has traffic noise levels above 60 CNEL, the proposed buildings and outdoor usable areas are located in the southern area of the property such that future traffic noise levels will range from 42.1 CNEL at the private yard in the southeast corner of the property to 55.9 CNEL at the private yard at the northeast corner of the building. Due to the locations of the outdoor usable areas, the future calculated noise levels are all below 60 CNEL and, except for the private yard at the northeast corner of the building, most are below 55 CNEL. These future traffic noise impact results show that no exterior outdoor use mitigation is required.

The County of San Diego Noise Element states that interior noise levels shall not exceed 45 CNEL and adheres to the accepted rule that an exterior wall provides a minimum reduction of 15 CNEL to the interior room. It also states that if exterior noise levels cannot be reduced to 60 CNEL, then an exterior-to-interior noise study must be conducted to prove that interior noise levels will not exceed 45 CNEL. Calculations show that future traffic noise levels at the proposed building facades will range from 42.0 CNEL at the first level of the south facade to 57.6 CNEL at the second level of the north facade. The proposed location of the building beyond the 60 CNEL noise contour is directly related to the calculated impact noise levels falling below 60 CNEL. Since these calculated future traffic noise levels are less than 60 CNEL, future interior noise levels will be below 45 CNEL, thereby ensuring a quiet residential habitable interior living space. These results also mean that future exterior-to-interior calculations will not be required.

### 2.0 INTRODUCTION

This acoustical analysis report is submitted to satisfy the acoustical requirements of the County of San Diego as directed by the project scoping letter for a zoning change from the present C36 to C34. The project scoping letter is included in Appendix A. The purpose of this analysis is to assess noise impacts from nearby roadway traffic and to identify project features or requirements necessary to achieve exterior outdoor use areas (common outdoor use areas, decks and private yards) to noise levels below 60 CNEL in compliance with the County of San Diego Noise Element.

All noise level or sound level values presented herein are expressed in terms of decibels, with A-weighting to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol  $L_{\text{EQ}}$ , for a specified duration. The CNEL is a 24-hour average, where

sound levels during evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dB weighting, and sound levels during nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dB weighting. This is similar to the Day-Night sound level,  $L_{\text{DN}}$ , which is a 24-hour average with an added 10 dB weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on A-weighted decibels. These metrics are used to express noise levels for both measurement and municipal regulations, for land use guidelines, and for enforcement of noise ordinances. Further explanation can be provided upon request.

## 2.1 Project Location

The project site is located at 1121 Greenfield Drive in El Cajon, County of San Diego, California. The Assessor's parcel number (APN) for the property is 484-101-08. Currently, the land is zoned C36, General Commercial. The project proposes amending the zoning to C34, General Commercial/Residential. Neighboring land use in the proximity of the project is residential on the eastern, southern, and western sides and commercial property on the northern side of the site location.

The project location is shown on the Vicinity Map, Figure 1, following this report. An Assessor's Parcel Map, Satellite Aerial Photograph, Topographic Map, and Planned Land Use Map of this area are also provided as Figures 2 through 5.

# 2.2 Project Description

The proposed project, known as Casa de Verde Apartments, consists of the construction of one new 2-story building consisting of 13 apartment units, including an on-site Manager's studio. The project will also include 6 private yards, 4 private decks and a community court yard. The overall property is rectangular in shape with an overall site area of approximately 0.45 acres.

# 3.0 ENVIRONMENTAL SETTING

# 3.1 Existing Noise Environment

The primary noise source in the vicinity of the project site is traffic noise from Greenfield Drive and 1<sup>st</sup> Street. There are no bus stops located in the immediate vicinity of the project site; therefore, bus stop noise is determined to be negligible with no penalties applied.

Gillespie Field is located west of the site location and is the nearest airport. Its noise impact is negligible because the project site location is 1.1 miles from the airport influence area.

No other noise sources are considered to be significant.

# 3.1.1 Vehicle Traffic Noise

Greenfield Drive is a two-lane, two-way road running east-west directly north of the project site. The paved roadway width is 66-feet, curb to curb. The posted speed limit is 35 mph. According to the San Diego Association of Governments Department of Transportation Website (<a href="http://maximus.sandag.org/tfic/trfic30.html">http://maximus.sandag.org/tfic/trfic30.html</a>), Greenfield Drive, in the vicinity of the project site, carries a current (2000) traffic volume of approximately 10,000 Average Daily Trips (ADT). According to the current San Diego Circulation Element, the road is classified as a Light Collector Road. The design speed for a Light Collector Road is 45 mph. To ensure a worst-case scenario

traffic model, the design speed and not the posted speed is used for all current traffic noise calculations.

1<sup>st</sup> Street is a two-lane, two-way Light Collector Road running north-south to the west of the project site. The paved roadway width is approximately 45-feet, curb to curb. Based on the San Diego County Circulation Element, the speed design is 45 mph. According to the SANDAG website, 1<sup>st</sup> Street currently carries a traffic volume of approximately 6,000 ADT in the vicinity of the project site.

The current calculated on-site noise level at the center of the north side of the project site is 67.4 CNEL. Current and future (see 3.2) traffic volumes for the roadway sections near the project site are shown in Table 1. For further roadway details and projected future ADT traffic volumes, please refer to Appendix B: Traffic Noise Model Data and Results.

TO STATE OF THE ST	Table 1.0	Overall Roadway Tr	affic Information	
	Design S	peed (mph)	The second secon	
Roadway Name	Current	Future	Current ADT (2000)	Future ADT (2030)
Greenfield Drive	45	45	10,000	10,680
1st Street	45	45	6,000	10,000

Traffic composition information for Greenfield Drive and 1<sup>st</sup> Street was not readily available. Following research on neighboring and surrounding land use, roadway classification and application of our professional experience during our on-site study, percentages of 3% medium and 2% heavy truck traffic were uniformly applied for Greenfield Drive and 1.5% medium and 0.5% heavy truck traffic were uniformly applied for 1<sup>st</sup> Street.

The noise environment at the project site is primarily the result of vehicle traffic traveling on Greenfield Drive and 1<sup>st</sup> Street. Without mitigation or proposed project structures, the current 70 CNEL traffic contour runs parallel to the centerline of Greenfield Drive 43-feet to the south. The 65 CNEL noise contour is similarly located 108-feet from the Greenfield Drive centerline. The 50 CNEL contour is located approximately 160-feet from the Greenfield Drive centerline. The 55 CNEL noise contour runs at an angle from the Greenfield Drive centerline, beginning 305-feet from the centerline on the east side of the property and ending 245-feet from the centerline on the west side of the property. For a graphical representation of these contours, please refer to Figure 6: Site Plan Showing Current Traffic CNEL Contours and Noise Measurement Location.

#### 3.1.2 Measured Noise Level

An on-site inspection and traffic noise measurement were made on the morning of Thursday, November 16, 2006. The weather conditions were as follows: clear skies, low humidity, temperatures in the high 80's with winds from the west at 2 mph. A "one-hour" equivalent measurement was made at the northeastern corner of the project site. The microphone was placed approximately five feet above the existing project site grade. Traffic volumes for Greenfield Drive were recorded for automobiles, medium-size trucks, and large trucks during the measurement period. After a continuous 15-minute sound level measurement, there was no change in the  $L_{EQ}$  and results were then recorded. The measured noise level and related weather conditions are found in Table 2. The calculated equivalent hourly vehicle traffic count adjustment and a complete tabular listing of all traffic data recorded during the on-site traffic noise measurement are found in Appendix B: Traffic Noise Model Data and Results.

Table 2. On-S	ite Noise Measurement Conditions and Results
Date	Thursday, November 16 <sup>th</sup> , 2006
Time	11:30 a.m. – 11:45 a.m.
Conditions	Clear skies, winds form the west @ 2 mph, temperature in the high 80's with low humidity
Measured Noise Level	65.5 dBA L <sub>EQ</sub>

#### 3.1.3 Calculated Noise Level

Noise levels were calculated for the site using the methodology described in Section 4.1 for the location, conditions, and traffic volumes counted during the noise measurements. The calculated noise levels (L<sub>EQ</sub>) were compared with the measured on-site noise level to determine if adjustments or corrections (calibration) should be applied to the traffic noise prediction model, Traffic Noise Model Version 2.5. Adjustments are intended to account for site-specific differences, such as reflection and absorption, which may be greater or lesser than accounted for in the model.

The measured noise level of 65.5 dBA  $L_{EQ}$  for Greenfield Drive was compared to the calculated (modeled) noise level of 65.3 dBA  $L_{EQ}$ , for the same conditions and traffic flow. As there was only a 0.2 dB difference between the measured and the calculated noise level, no adjustment was deemed necessary to model future noise levels for this location. Please refer to Table 3 for further evaluation.

- Table 3.	Calculated vers	us Measured Traff	c Noise Data	Tarahan Basaka ayan
Roadway	Calculated	Measured 🚓 🤋	Difference	Correction
Greenfield Drive	65.3 dBA L <sub>EQ</sub>	65.5 dBA L <sub>EQ</sub>	0.2 dB	None

### 3.2 Future Noise Environment

According to the proposed San Diego County General Plan for 2020 the classification of the section of Greenfield Drive in the vicinity of the project site will change to a two-lane 2.2B Light Collector with continuous turn lane (2+ lanes). This new classification has a lower design speed of 40 mph. The board is in consensus regarding the change without any noted disagreement. According to the

same general plan, traffic volumes will increase to 10,680 ADT for 2030. This information is in Appendix C and is also available in the "Board of Supervisors Hearing - August 2, 2006: Proposed Changes to Circulation Element Road Network and Framework" on C-199 (roadway classification change, C-177 (board consensus) and C-178 (predicted future ADT), CE Road Segment 31D www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/pubs/pc\_jul06/c\_lakeside.pdf).

However, since this plan has not yet been officially adopted by the County of San Diego, Richard Chin, traffic engineer for the County of San Diego, has advised that the current roadway classification be used. Therefore, the same speed design (45 mph) will still be used. The alignment and roadbed grade elevations are expected to remain the same for this section of roadway. According to the SANDAG website, the traffic volume for Greenfield Drive will decrease to 9,000 ADT for 2030, but to ensure a worst-case scenario, the traffic volume from the proposed 2020 General Plan, 10,680 ADT, is used.

According to the SANDAG website, the traffic volume for 1<sup>st</sup> Street will increase to 10,000 ADT for 2030. The roadway classification, speed limit, alignment and roadbed grade elevations are expected to remain the same for this section of roadway.

The same truck percentages from the existing traffic volumes were used for future traffic volume modeling.

The future (2030) traffic noise level at the northern property line is expected to increase to 67.6 CNEL. For further roadway details and projected future ADT traffic volumes, please refer to Appendix B: Traffic Noise Model Data and Results.

The future noise environment at the project site is primarily the result of vehicle traffic traveling on Greenfield Drive and 1<sup>st</sup> Street. Without mitigation or proposed project structures, the future 70 CNEL traffic contour runs parallel to the centerline of Greenfield Drive at a location 48-feet to the south. The future 65 CNEL noise contour is similarly located 113-feet from the Greenfield Drive centerline. The future 60 CNEL contour is located approximately 165-feet from the Greenfield Drive centerline. The future 55 CNEL noise contour runs at an angle from the Greenfield Drive centerline, beginning 315-feet from the centerline on the east side of the property and ending 255-feet from the centerline on the west side of the property. For a graphical representation of these contours, please refer to Figure 7: Site Plan Showing Future Traffic CNEL Contours and Noise Measurement Location.

### 4.0 METHODOLOGY AND EQUIPMENT

### 4.1 Methodology

#### 4.1.1 Field Measurement

Typically, a "one-hour" equivalent sound level measurement ( $L_{EQ}$ , A-Weighted) is recorded for at least one noise-sensitive location on the site. During the on-site noise measurement, start and end times are recorded, vehicle counts for cars, medium trucks (double-tires/two axles), and heavy trucks (three or more axles) are made for the corresponding road segment(s). Supplemental sound measurements of one hour or less in duration are often made to further describe the noise environment of the site.

For measurements of less than one hour in duration, the measurement time is long enough for a representative traffic volume to occur and the noise level (L<sub>EQ</sub>) to stabilize; 15 minutes is usually sufficient for this purpose. The vehicle counts are then converted to one-hour equivalent volumes by using the appropriate multiplier. Other field data gathered includes measuring or estimating distances, angles-of-view, slopes, elevations, roadway grades, and vehicle speeds. This data was checked against the available maps and records.

### 4.1.2 Roadway Noise Calculation

The Traffic Noise Model, Version 2.5 program released by the U.S. Department of Transportation was used for calculate the future daytime average hourly noise level (HNL) at various locations at the project site. The daytime average hourly traffic volume is calculated as 0.058 times the ADT, based on the studies made by Wyle Laboratories (see reference). The HNL is equivalent to the LEQ. and both are converted to the CNEL by adding 2.0 decibels, as shown in the Wyle Study. Future CNEL is calculated for desired receptor locations using future road alignment, elevations, lane configurations, projected traffic volumes, estimated truck mixes, and vehicle speeds. Noise attenuation methods may be analyzed, tested, and planned with TNM, as required. Further explanation can be supplied on request.

#### 4.2 **Measurement Equipment**

Some or all of the following equipment was used at the site to measure existing noise levels:

- Larson Davis Model 720 Integrating Sound Level Meter, Serial # 0263
- Larson Davis Model CA150 Calibrator, Serial # 0203
- Hand-bearing magnetic compass, microphone with windscreen, tripods
- Distance measurement wheel, digital camera

The sound level meter was field-calibrated immediately prior to the noise measurement and checked afterward, to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with a sound level meter that conforms to the American National Standards Institute specifications for sound level meters ANSI SI.4-1983 (R2001). All instruments are maintained with National Bureau of Standards traceable calibration, per the manufacturers' standards.

### 5.0 IMPACTS AND MITIGATION

### 5.1 Exterior

Policy 4B of the County of San Diego Noise Element (part VIII) of the current San Diego County General Plan states that exterior noise levels shall not exceed 60 CNEL at residential outdoor usable areas. Calculations show that while a large part of the property on the northern side of the site has traffic noise levels above 60 CNEL, the proposed buildings and outdoor usable areas are situated to the southern area of the property such that future traffic noise levels will range from 42.1 CNEL at the private yard in the southeast corner of the property to 55.9 CNEL at the private yard at the northeast corner of the building. Table 4, below, gives a full list of CNEL values at outdoor areas. Due to the locations of the outdoor usable areas, the future calculated noise levels are all below 60 CNEL. These future traffic noise impact results show that no exterior outdoor use mitigation is required. For a graphical representation, please refer to Figure 8: Site Plan Showing Future Traffic CNEL Impacts at Proposed Residential Outdoor Use Areas.

Table 4. Calculated Future Traffic Noise Impacts at Outdoor Use Areas					
Receiver	Receiver Location	Traffic CNEL			
R-1	West Deck - North	50.7			
R-2	Community Court Yard	49.2			
R-3	West Deck - South	45.8			
R-4	South Private Yard - West	42.1			
R-5	South Private Yard - East	45.4			
R-6	East Private Yard - South	48.3			
R-7	East Private Yard - Central	49.8			
R-8	East Private Yard - North	55.9			

#### 5.2 Interior

The State Building Code, Policy 4B of the County of San Diego Noise Element (part VIII) of the current San Diego County General Plan and other agencies (such as HUD) require an acoustical analysis for any residential facilities proposed in an area which has or will have a noise level in excess of 60 CNEL and adhere to the accepted rule that an exterior wall provides a minimum reduction of 15 CNEL to the interior room. The General Plan also states that if exterior noise levels cannot be reduced to 60 CNEL, then an exterior-to-interior noise study must be conducted to prove that interior noise levels will not exceed 45 CNEL

The proposed project consists of the construction of one new 2-story building consisting of 12 units as well as an office/Manager's studio. The future acoustical traffic noise model was evaluated to determine the traffic noise levels at the facades for each floor of the proposed building. Calculations show that future traffic noise levels at the proposed building facades will range from 42.0 CNEL at the first level of the south facade to 57.6 CNEL at the second level of the north facade. Table 5 gives a full list of CNEL values at building facades. The proposed location of the building beyond the 60 CNEL noise contour is directly related to the calculated impact noise levels falling below 60 CNEL. Since these calculated future traffic noise levels are less than 60 CNEL, future interior noise levels will be below 45 CNEL, thereby ensuring a quiet interior residential habitable living space. These results also mean that future exterior-to-interior calculations will not be required at the time building plans are submitted for review. For a graphical representation, please refer to Figure 9: Site Plan Showing Future Traffic CNEL Impacts at Building Facades.

R-1         North Façade         1         56.6           R-2         West Façade - North         1         49.4           R-3         West Façade - South         1         45.6           R-4         South Façade         1         42.0           R-5         East Façade - South         1         48.0           R-6         East Façade - North         1         51.4           R-7         North Façade         2         57.6           R-8         West Façade - North         2         48.7           R-9         West Façade - South         2         46.0           R-10         South Façade         2         48.1           R-11         East Façade - South         2         51.9			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	agades
R-1       North Façade       1       56.6         R-2       West Façade - North       1       49.4         R-3       West Façade - South       1       45.6         R-4       South Façade       1       42.0         R-5       East Façade - South       1       48.0         R-6       East Façade - North       1       51.4         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9	Receiver	Receiver Location	Level	Traffic CNFI
R-2       West Façade - North       1       49.4         R-3       West Façade - South       1       45.6         R-4       South Façade       1       42.0         R-5       East Façade - South       1       48.0         R-6       East Façade - North       1       51.4         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9		North Facade	1	
R-3       West Façade - South       1       49.4         R-4       South Façade       1       42.0         R-5       East Façade - South       1       48.0         R-6       East Façade - North       1       51.4         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9			1	
R-4       South Façade       1       45.6         R-5       East Façade - South       1       42.0         R-6       East Façade - South       1       48.0         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9	R-3		1	
R-5       East Façade - South       1       48.0         R-6       East Façade - North       1       51.4         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9	R-4		1	
R-6       East Façade - North       1       51.4         R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9			1	
R-7       North Façade       2       57.6         R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9	R-6		1	
R-8       West Façade - North       2       48.7         R-9       West Façade - South       2       46.0         R-10       South Façade       2       48.1         R-11       East Façade - South       2       51.9	R-7		1	
R-9     West Façade - South     2     46.0       R-10     South Façade     2     48.1       R-11     East Façade - South     2     51.9	R-8			
R-10         South Façade         2         46.0           R-11         East Façade - South         2         51.9	R-9			
R-11 East Façade - South 2 51.9	R-10			
	R-11			
East Façade - North 2 52.6	R-12	East Façade - North		51.9
		North Façade – Manager's Studio	2	57.2

# 5.3 Property Line Impacts

The facility will provide 12 air conditioners, which will be located underneath the stairwells. The analyzed units are Mitsubishi Slim Man units. The maximum manufacturers noise rating for units to be allowed at this site is a Sound Power rating of 69 dBA.

	Table	e 6. Mitsi	ubishi SI	im Man (	Sound Po	wer Level	<u> </u>		
Frequency Sound Level	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	2000	<u>4000</u>	8000	dBA
Sound Level	<u>/1.9</u>	73.1	<u>69.9</u>	<u>63.5</u>	<u>63.4</u>	<u>61.4</u>	<u>54.4</u>	<u>48.1</u>	<u>68.7</u>

The impact at the worst property line location to the west of the site is 45.3 dBA, if all units are operating for a continuous one-hour time period. This level is in compliance with ordinance levels for a maximum property line noise impact of 45 dBA.

The Cadna calculated impact graphic are attached as Figure 10.

# 6.0 CERTIFICATION

All recommendations for noise control are based on the best information available at the time our consulting services are provided. However, as there are many factors involved in sound and impact transmission, and Eilar Associates has no control over the construction, workmanship or materials, Eilar Associates is specifically not liable for final results of any recommendations or implementation of the recommendations.

The findings and recommendations of this acoustical analysis report are based on the information available and are a true and factual analysis of the potential acoustical issues associated with the Casa de Verde Apartment project in El Cajon in the County of San Diego, California. This report was prepared by Mark Sturino, Ian Brewe, Michael Burrill and Douglas Eilar.

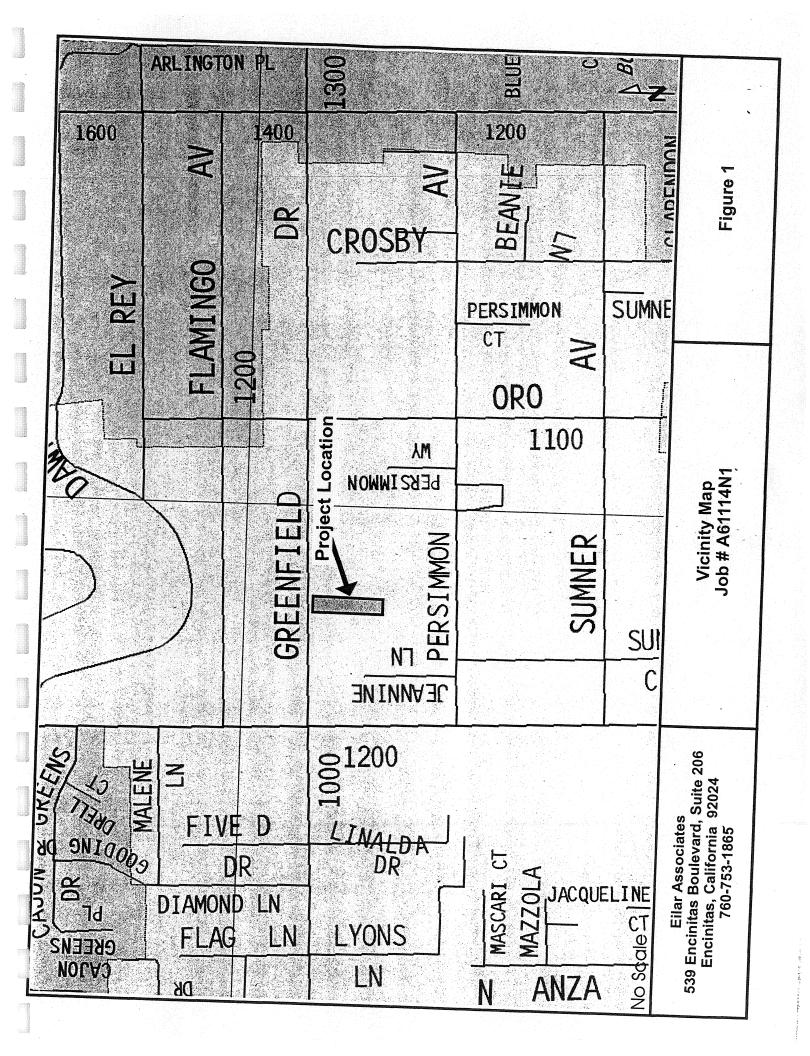
Michael Burrill, Senior Acoustical Consultant

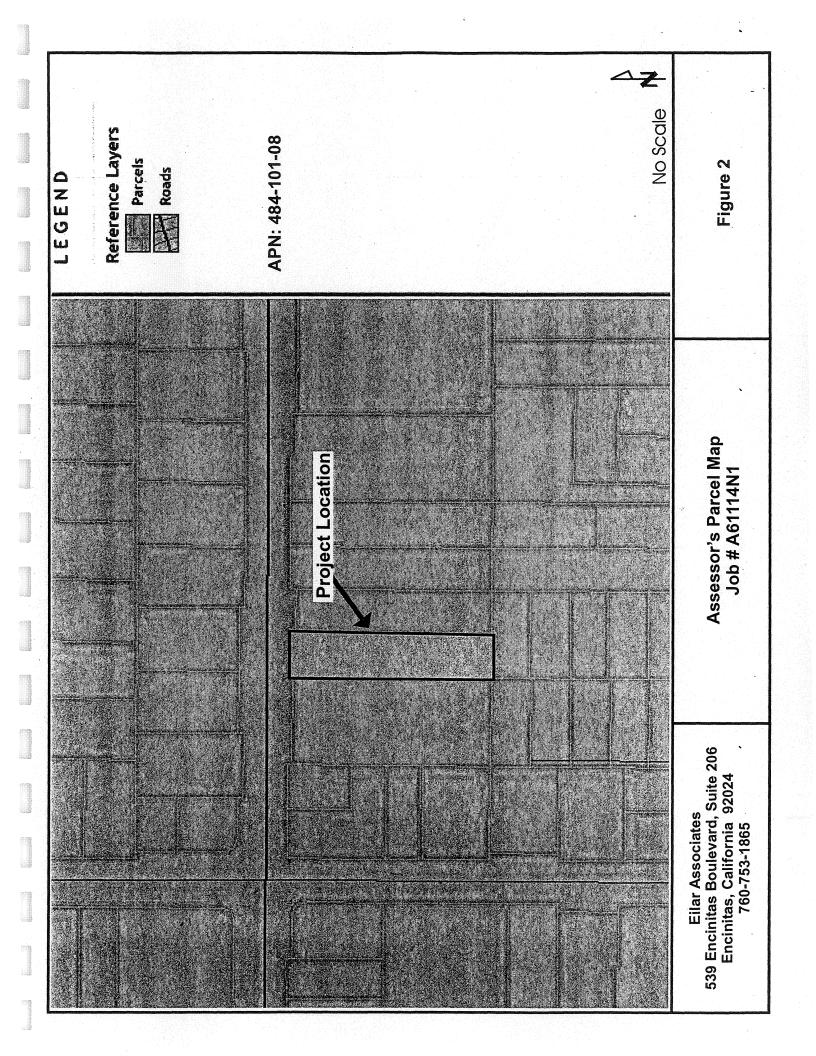
Douglas K. Eilar, Principal

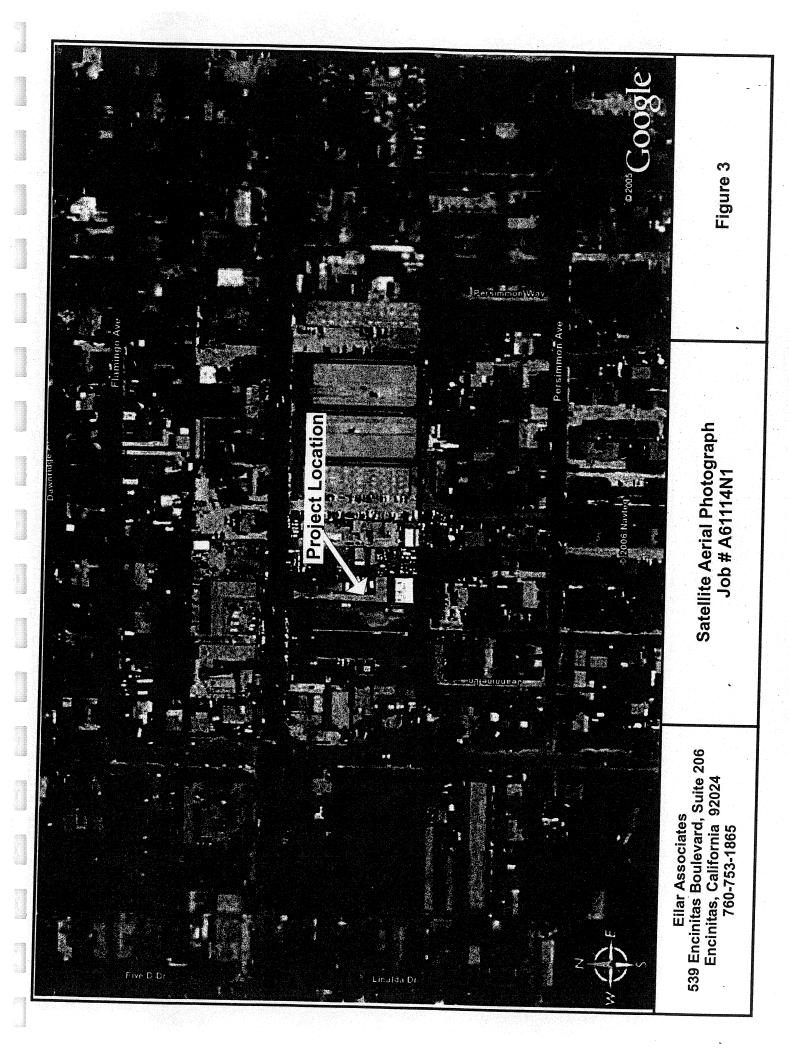
### 7.0 REFERENCES

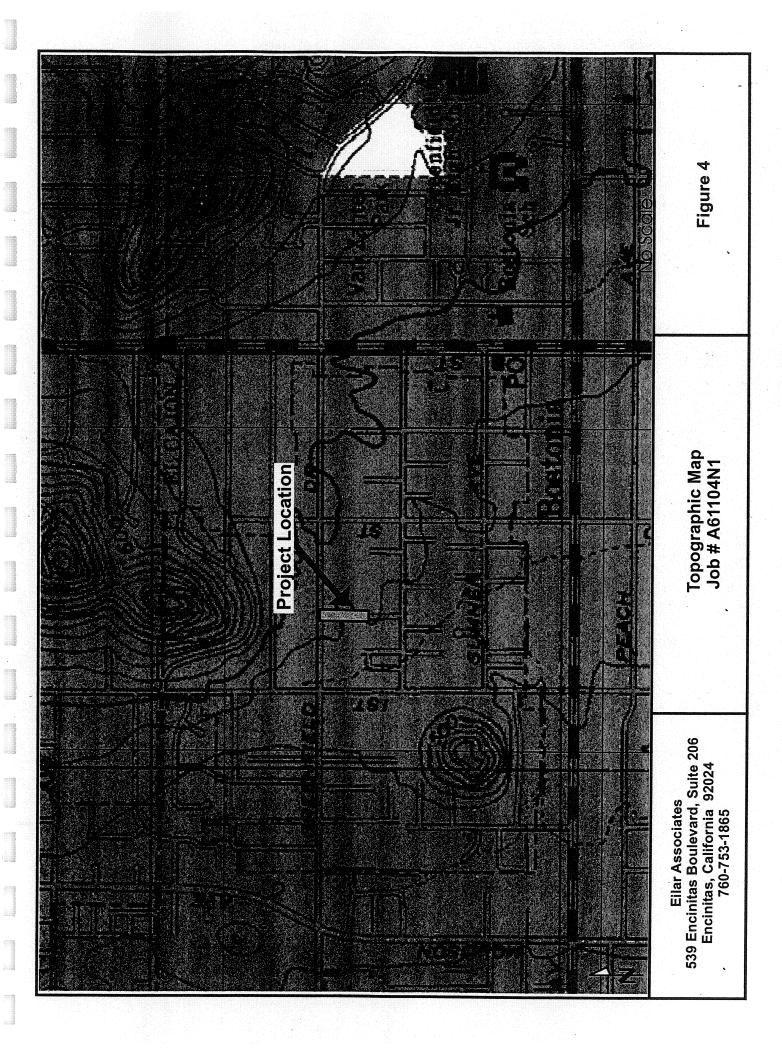
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- 2. 2001 California Noise Insulation Standards, effective 11/01/02, Based on 1997 Uniform Building Code, California Code of Regulations, Title 24.
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- 4. County of San Diego Noise Element of the General Plan.
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- NBS Building Sciences Series 77, Acoustical and Thermal Performance on Exterior Residential Walls, U.S. Department of Commerce/National Bureau of Standards, November 1976.
- Western Electro-Acoustic Laboratory, Inc., 1711 Sixteenth Street, Santa Monica, California 90404, 213-80-9268, Sound Transmission Loss Vs. Glazing Type, Window Size and Air Filtration, January 1985. The research described in this report was prepared for the California Association of Window Manufacturers, 823 North Harbor Boulevard, Suite E, Fullerton, California 92632, 714-525-7088.

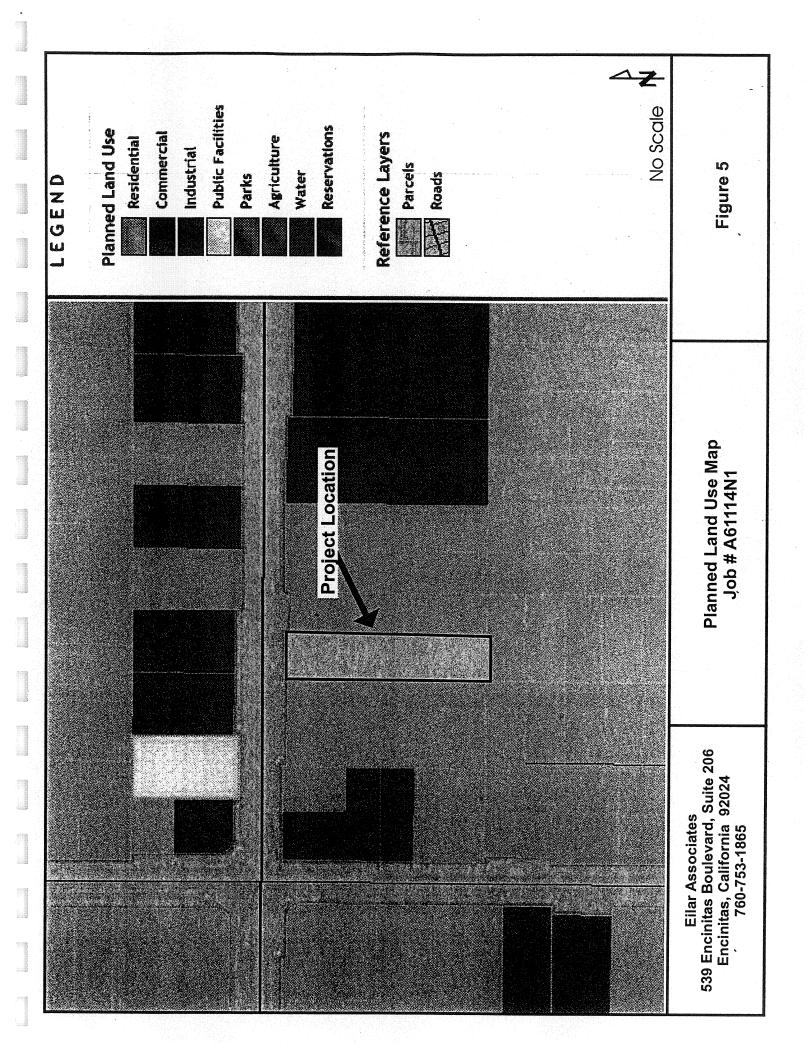
**FIGURES** 

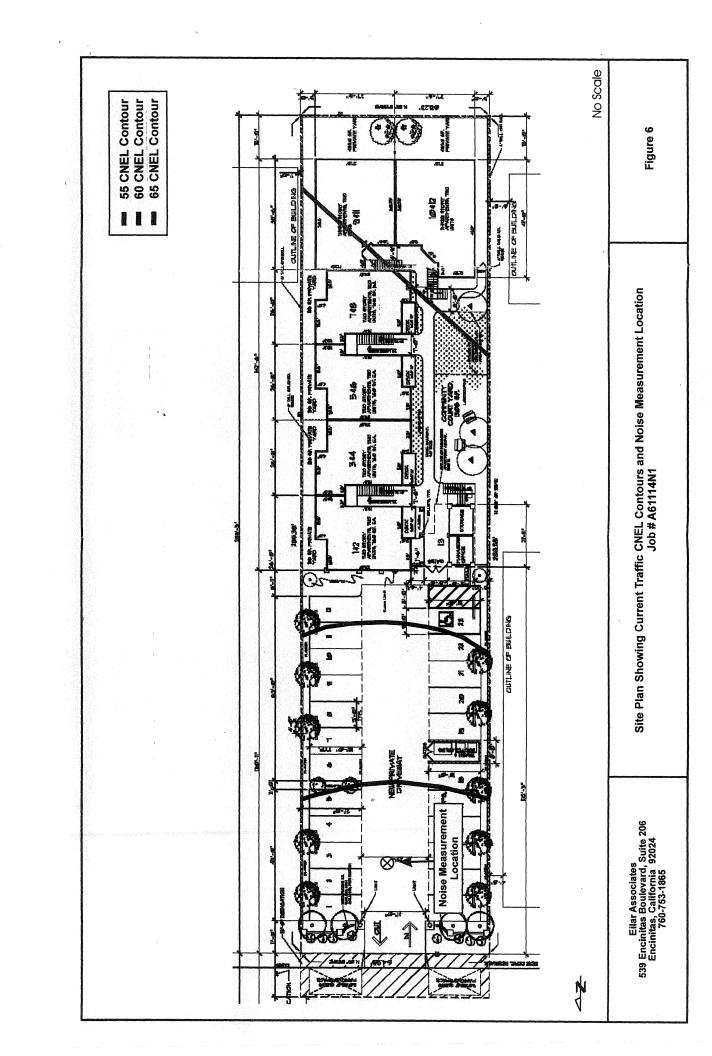


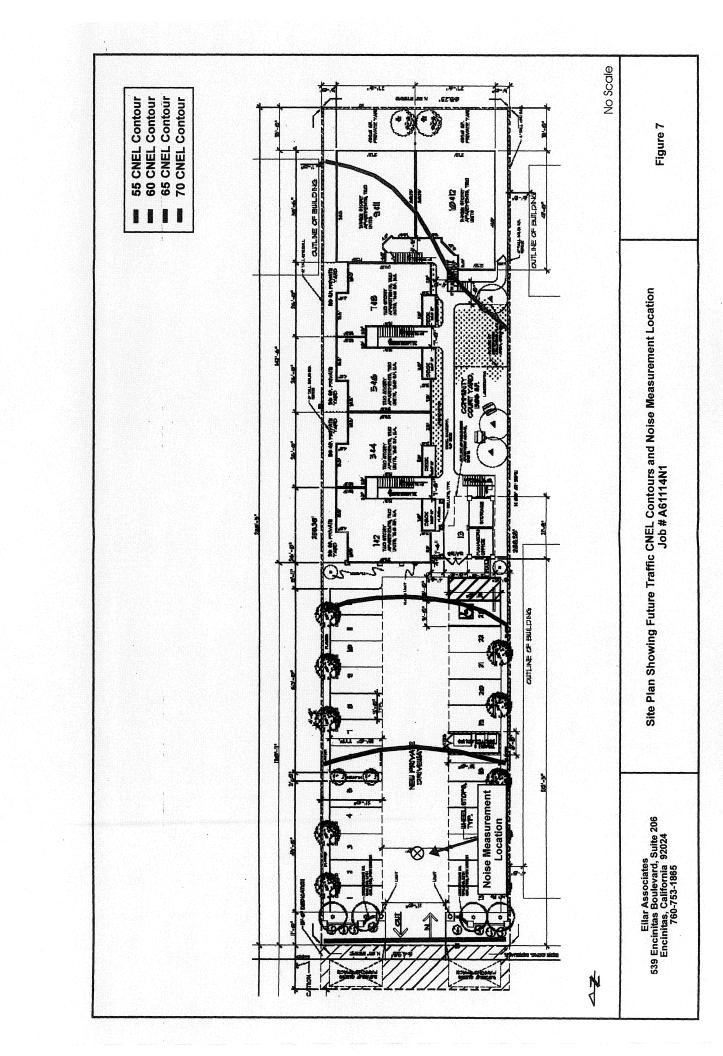


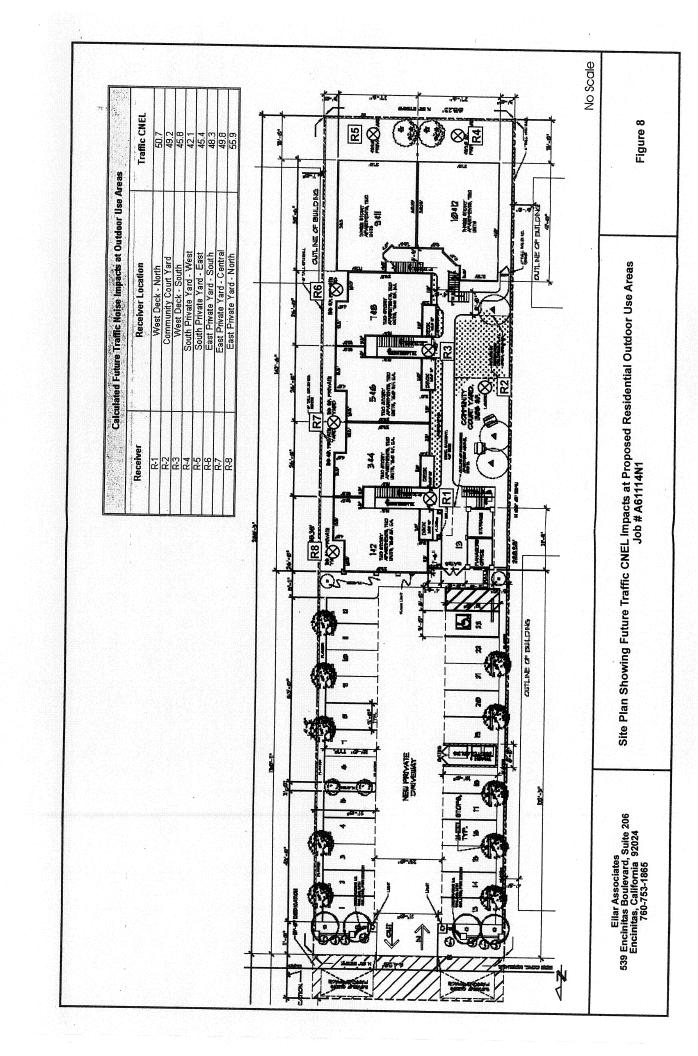


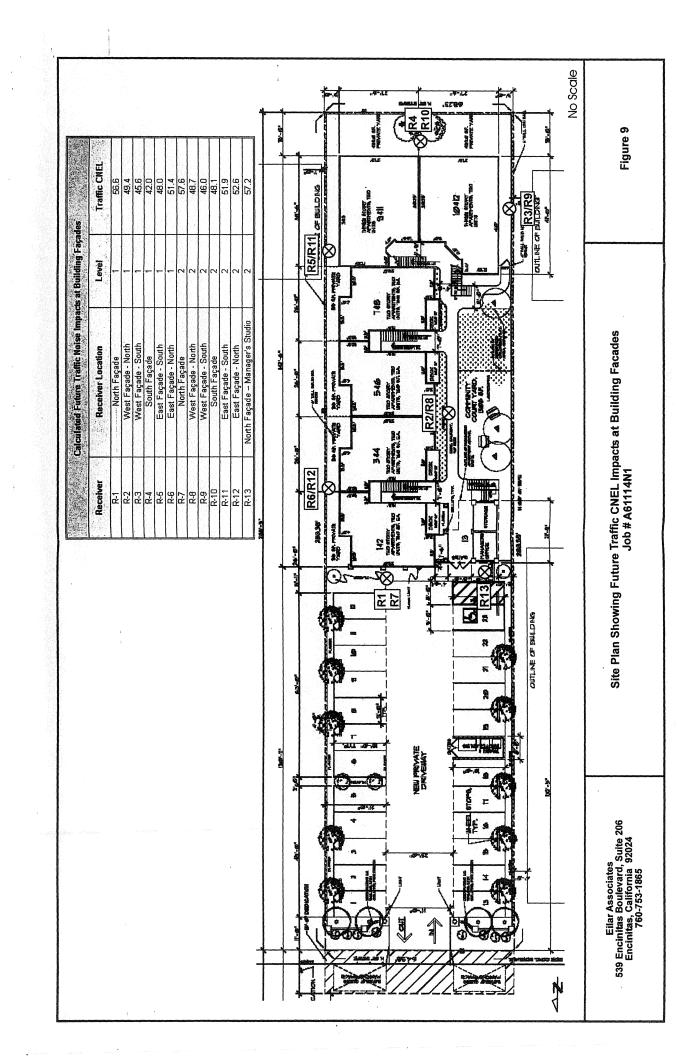


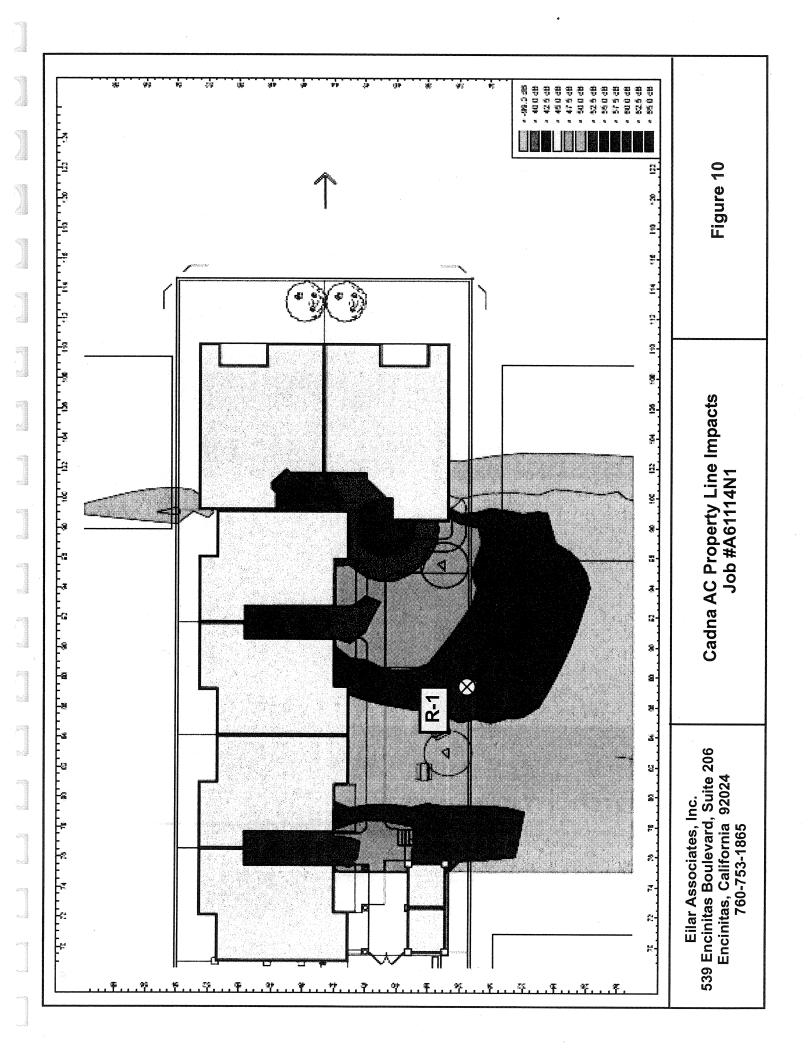












# APPENDIX A

County of San Diego Project Scoping Letter





# County of San Fiego

SAN MARCOS OFFICE 151 E. CARMEL STREET SAN MARCOS, CA 92076-4309 (750) 471-0730

EL CAJON OFFICE 200 EAST MAIN ST. - SIXTH FLOOR EL CAJON, CA 92020-3912 (619) 447-4030

### DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE &, SAN DIEGO, CALIFORNIA 92123-1666 INFORMATION (858) 694-2960 TOLL FREE (800) 411-0017

October 4, 2006

Mr Alan Austin Austin & Associates 1622 Pioneer Way

El Cajon, California 92020

120 - 619 - 447 - 5502 Fayo 120 - 619 - 440 - 3624 plane

CASE NUMBERS: R06-012; S06-036; ER 06-14-038 , CG 4676

PROJECT NAME: Casa de Verde Apartments

PROJECT ADDRESS: 1121 North Greenfield Drive; APN 484-101-08

Dear Mr Austin:

The Department of Planning and Land Use (DPLU) has reviewed your application for a Zone Reclassification and Site Plan and is providing you with the attached package of information as a guide for further processing your application. This package consists of:

- Determination of Completeness pursuant to Section 65943 of the Government Code:
- Determination of Completeness pursuant to the California Environmental Quality Act (CEQA);
- A MATRIX which summarizes all the information we are requesting:
- Attachments which are detailed and provide you with very specific information on our request(s);
- Preliminary conditions from the Department of Public Works (DPW).
- An Environmental Cost Estimate; and,
- Estimated Processing Schedule

### MAJOR PROJECT ISSUE(S)

The following project issue(s) were identified during the project scoping and are further discussed in the attachments to this letter. These issue(s) may require substantial redesign of the proposed project or, if not resolved, would result in a recommendation for project denial by DPLU. These issue(s) discussed below, were identified based upon information presently available to the County and are subject to change upon submittal of further information and studies:

The Department of Public Works has identified your project as requiring centerline review, dedication, and potentially improvement of Greenfield Drive to a width of 48 feet from centerline per its status as a Collector Road with bicycle lanes per the Circulation Element of the County General Plan; see Attachment of Preliminary DPW Conditions for further information.

in order to definitively resolve what the project design implications of this determination would be, please provide written evidence of completed centerline review (per the attachment) and the determination thereof. If it is determined that additional improvements are required and you wish to have such a determination re-evaluated, you must submit a road exception/modification request (<a href="http://www.sdcountv.ca.gov/dbw/docs/ExceptionModificationForm.pdf">http://www.sdcountv.ca.gov/dbw/docs/ExceptionModificationForm.pdf</a>). A decision must be rendered on such a request before staff can take further action on project review. Any subsequent project design must reflect the decision on the road exception/modification request and will be evaluated accordingly for compliance with applicable requirements including any necessary mitigation measures.

#### PROJECT DESCRIPTION

The project is a request for a zone reclassification of a 0.44-acre parcel from C36 General Commercial to C34 General Commercial/Residential Use Regulations. The subject property is designated (13) General Commercial by the Pepper Drive/Bostonia Community Plan. The rezone proposal is requested in order to allow for multifamily residential units as a primary use of the property. The C34 zone allows Family Residential as a permitted use per Section 2342.a of the Zoning Ordinance, whereas the C36 zone only allows residential uses as secondary to principal commercial uses. The property is currently zoned to allow a density of 4 units per acre, and is proposed to be increased to a minimum of 26 units per acre. In order to facilitate review of the ultimate project, a concurrent Site Plan has been submitted for architectural design and landscaping review in accordance with a prospective "D" design special area regulation to be proposed with the zone reclassification.

# DETERMINATION OF COMPLETENESS PURSUANT TO SECTION 65943 OF THE GOVERNMENT CODE

DPLU has reviewed your application and has determined that it is not complete pursuant to Section 65943 of the Government Code. Please review the attachments to this letter to further detail continued processing requirements.

# DETERMINATION OF COMPLETENESS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The Department of Planning and Land Use has completed its review of your Application for Environmental Initial Study (AEIS) and determined it not to be "complete" as defined by the CEQA. At this time, additional information will be required to determine your project's potential impacts on the environment and to complete the CEQA Environmental Initial Study.

These reports will be reviewed for technical accuracy and to determine whether a Negative Declaration or Environmental Impact Report will be necessary for your project. Additional copies of the final technical reports will be required when your project's environmental documents are circulated for public review. The reasons for this determination and the information required are found in the attachments to this letter.

CONSULTANT LIST & MEMORANDUM OF UNDERSTANDING (MOU)
The County of San Diego's CEQA guidelines require that environmental technical studies be prepared by a California Licensed professional (i.e., engineer, geologist) or consultant from the County's CEQA Consultant List, which can be found on the County of San Diego's website at:
http://www.sdcdplu.org/dplu/Resource/docs/3~pdf/consList.pdf.

Applicants are responsible for selecting and direct contracting with specific consultants from the County's list to prepare CEQA documents for private projects. Prior to the first submittal of a CEQA document prepared by a listed consultant for a private project, the applicant, consultant, consultant's firm (if applicable) and County shall execute the Memorandum(s) of Understanding (MOU). The responsibilities of all parties involved in the preparation of environmental documents for the County (i.e. applicant, individual CEQA consultants/sub-consultants, consulting/sub-consultant firms, and County) are clearly established in the attached MOU for each requested applicable study. The clear identification of roles and responsibilities for all parties is intended to contribute to improved environmental document quality. The MOU can be found on the Department's website at: http://www.sdcounty.ca.gov/dplu/docs/MOU.doc.

PROJECT ISSUE RESOLUTION PROCESS: If you have disagreements with the requirements within this letter you should contact the project staff to resolve those issues. Upon discussion with project staff, you may have these issues referred to the Project Issue Resolution process to provide you with an opportunity to quickly and inexpensively have issues considered by senior County management. Issues considered under this procedure can include disagreements with staff interpretations of codes or ordinances, requests for additional information or studies, or disagreements regarding project related processing requirements. Please contact me to learn more about this process, the limitations, or to request an application form.

ESTIMATED PROCESSING SCHEDULE: An estimated processing schedule is attached. Several assumptions were required to supply a schedule at this time and are listed at the bottom of the estimated schedule. If these assumptions prove to be incorrect, the schedule will be adjusted. The schedule also makes assumptions regarding County staff workload, submittal turnaround times by the applicant, and the number of iterations of submittals required for the applicant to obtain an adequate document. These assumptions are based on staff's experience with this type of case. If reports are determined to be acceptable with less than three reviews or the

applicant turnaround times shortened, the "standard" schedule can be reduced by as much as 50 percent in some cases.

SUBMITTAL REQUIREMENTS: Unless other agreements have been made with County staff, you must submit all of the following items concurrently and by the submittal date listed below in order to make adequate progress and to minimize the time and costs in the processing of your application. The submittal must be made to the DPLU Zoning Counter at 5201 Ruffin Road, Suite B, San Diego, CA 92123-1666 and must include the following items:

- a. A COPY OF THIS LETTER. The requested information will not be accepted unless accompanied by this letter.
- The following information and/or document(s) with the requested number of copies as specified:

INFORMATION/DOCUMENT	NO. OF	LEAD REVIEW DEPT./SECTION
Revised Site Plan	15	PPCC for distribution
Written Centerline Review Determination	2.	Planner, DPW
Road Exception/Modification Request*	2	Planner, DPW
Rezone Box & "D" Standards	0 1	Planner
Noise Impact Analysis	2	Planner, Acoustician
Preliminary Grading Plan	3	Planner, DPW (2)
Preliminary Drainage Study	3	Planner, DPW (2)
Major Stormwater Management Plan	3	Planner, DPW (2)
Traffic Impact Analysis	3	Planner, DPW (2)
Memorandum of Understanding for Noise & Impact Analyses	1 for each study	Planner

<sup>\*</sup>This may be waived if you choose not to have any dedication/improvement requirements of Centerline Review reconsidered.

### c. Deposits:

AGENCY	ACCOUNT NUMBER	DEPOSIT AMOUNT
DPLU-Planning	PLU 06-0066591	\$ 5,110
DPLU-Environmental	PLU 06-0066591	\$ 5,770
DPW	PWR 06-0066591	\$ 2,000
TOTAL ADDITIONAL DEPOSITS		\$12,880

The above is an estimate of the additional deposits required to process the application through hearing/decision.

Be aware that Section 362 of Article XX of the San Diego County Administrative Code, Schedule B, 5 states that:

The Director of Planning and Land Use may discontinue permit processing and/or recommend denial of the said project based on non-payment of the estimated deposit.

Several assumptions were required to supply the DPLU-Environmental cost estimate at this time in the process. If these assumptions prove to be incorrect, your cost estimate will be adjusted. These assumptions are listed at the bottom of the attached environmental cost estimate.

Should your application be approved, there will be additional processing costs in the future (e.g., Final Map processing costs, park fees, drainage fees, building the permit fees). The above estimate includes only the costs to get your presentance application(s) to hearing/decision and does not include these additional processing costs.

SUBMITTAL DUE DATE: In order to maintain adequate progress in the processing of your project, the DPLU requires that the revisions/information/deposits requested in this letter be submitted by February 1, 2007. An extension of this date may be granted at the discretion of the Director of Planning and Land Use. To request an extension, submit a written request, signed and dated by the project applicant. The request must include the proposed new submittal date and a brief reasoning for the extension request. If the revised document(s) are not received, or an approved extension request is not granted by the Director by the above date, the Department may make a recommendation for denial of your project to the appropriate decision-making authority based upon inadequate progress pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15109.

If you have any questions regarding this letter or other aspects of your project, please contact me at (858) 505-6380.

Sincerely.

Ed Gowens, Project Manager

Regulatory Planning Division

Joyce Peterson, 8675 Nottingham Place, La Jolla CA 92037 Lakeside Community Planning Group Ed Sinsay, Project Manager, DPW, M.S. 0336 Cathy Cibit, Planning Manager, DPLU, M.S. 0650

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### SCOPING LETTER MATRIX

- Altichmen	(iii) Mema
A	Planning Comments
В	Noise
C	Hydrology & Transportation
D	Department of Public Works Conditions
E	Estimated Processing Schedule
F	DPLU Environmental Cost Estimate

At your request, the Lakeside Community Planning Group continued its consideration of your project from its meeting of September 6, 2006. The group will likely consider the project upon receipt of your revised Site Plan, which will be forwarded to the group upon submittal to staff. Should the group identify concerns beyond issues identified within this letter, the same shall be forwarded to you upon receipt by staff.

# ATTACHMENT A Planning Comments

The application for zone reclassification is not complete. In order to process the application, you must provide a complete proposal for the entire zone box of the property; i.e., you must delineate the animal regulations and complete development regulations (density, building type, height/story, setbacks, etc.), or indicate no change is proposed for a given designator. Written justification <u>must</u> be provided to accompany any proposed designator change, and such explanation should speak to issues of compatibility with adjacent properties and appropriateness of a particular designator given property and community characteristics.

Of particular note, staff does not support the proposed rezone to 3 stories and associated conceptual design because of a lack of compatibility with community zoning, which is limited to 2 stories. This is also a fire safety issue, as the size and width of the parcel make the degree of incline for a fire ladder to reach a third story particularly steep. With respect to additional fire safety issues, a minimum 24-foot driveway is required throughout the property and all areas of the structure must be within a maximum 150-foot radius of fire apparatus; the present rear of the building on the Site Plan does not comply with this requirement.

Additionally, you must provide design and landscaping standards to comprise the proposed "D" design special area regulation. These standards should be consistent with the multifamily requirements of the Pepper Drive/Bostonia Community Plan, which speak to landscaping and private open space requirements.

#### Landscape Plan

1. The project design should provide additional screening. Examples include the lack of any vegetation in front of the proposed entry wall, one paim tree on either side of the back of the wall, the lack of shrubbery along the perimeter of the parking lot, deciduous trees proposed for the parking lot rather than evergreen varieties, the lack of vegetation along the face of the building in front of units 1 and 2, and the wide opening in the proposed wall. The fact that the wall is on the property line and there is no separation between the sidewalk and the wall for vegetation creates a visual distraction and the potential for vandalism by graffiti. Possible solutions would be to widen parking stalls 1 and 12 an additional two feet, place the wall (minus the pop-outs) along the edge of the parking stalls (increasing the width of the stalls will allow the user to open car doors and not be too tight getting in and out of their vehicle). This would create an area of approximately eight feet for landscaping between the parking lot and the sidewalk that could be heavily planted to provide necessary screening. A combination of large evergreen trees, shrubs, and vines on the wall would help

- substantially. The other alternative would be to relocate the parking to the rear of the property. Please review and make necessary revisions.
- 2. Three stalls on the east side of the parking lot need wheel stops. Please review and provide as required by the Off Street Parking Design Manual.

· **-**8-

- 3. Please verify the botanical name provided for Liquidambar. The botanical name used is for another species of tree, called Witch Hazel. Please clarify which species is proposed. Suggest using another species of tree for the parking lot. Liquidambar is known for its surface roots and the damage they may present in the future. Parking lot trees should be evergreen rather than deciduous to provide year round screening and heat relief.
- 4. Clarify what is proposed inside the wall pop-outs on either side of the driveway.
  - 5. Provide a children's play area within the community court yard. Please show conceptually what improvements are proposed for this area.
- 6. Show access to the gate shown on the east side of units 10 and 12.
- 7. Clarify what is proposed with the drainage easement along the rear property line. Show any proposed vegetation used for storm water treatment prior to leaving the property (as applicable). How will the proposed rock rip-rap energy dissipater be protected from soil runoff from the development prior to rear yards being. landscaped? Who will be responsible for landscaping and maintenance of the side and rear vards of the individual units?
- 8. Place a note on the plans that indicates who will be responsible for ongoing maintenance of the landscape, including the parking lot, the public right-of-way, and all common area landscapes.
- 9. Please note that cool season turf shall be kept to no more than 15% of the total landscaped area proposed. This includes private backyards and the community court yard.

### Preliminary Grading Plan

Per DPW review, provide a preliminary grading plan with existing and proposed topography and grading that shows lines of inundation of the limits of the 100-year flood along drainage watersheds in excess of twenty-five (25) acres that flows through or adjacent to the property, labeled "Subject To Inundation by The 100-Year Flood" on the Plot Plan. All of the above shall be to the satisfaction of the Director of Public Works. Guidelines for preliminary grading plan submittals are available at: http://www.sdcountv.ca.gov/dpw/watersheds/land\_dev/drainage.html



R06-012; S06-036

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October 4, 2006

## ATTACHMENT B Noise Analysis

The entire project site lies within a projected 60 decibel noise contour, and preliminary noise prediction estimates indicate that without site-specific noise mitigation measures, "noise sensitive" uses at the project site may be impacted by road noise levels that exceed the applicable sound limits of the Noise Element of the General Plan. The Noise Element defines "noise sensitive area" as "the building site of any residence, hospital, school, library, or similar facility where quiet is an important attribute of the environment."

Policy 4b of the Noise Element of the General Plan specifies that "Whenever it appears that new development will result in any (existing or future) noise sensitive area being subjected to noise levels of CNEL equal to 60 decibels or greater, an acoustical study should be required". According to the Noise Element of the General Plan, if the acoustical study shows that noise level at any noise sensitive area will exceed CNEL equal to 60 decibels, the development should not be approved unless the following:

- a. Modifications to the development have been made or will be made which reduce the exterior noise level below CNEL equal to 60 decibels; or
- b. If with current noise abatement technology it is infeasible to reduce exterior: CNEL to 60 decibels, then modifications to the development have been or will be made which reduce interior noise below CNEL equal to 45 decibels. Particular attention shall be given to noise sensitive interior spaces such as bedrooms. And,
- c. If finding "B" above is made, a further finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without modifications as described in "A" above.

If the acoustical study shows that noise levels at any noise sensitive area will exceed CNEL equal to 75 decibels, the development should not be approved.

For the County Noise Element, the noise study should assess the existing and forecasted noise impacts to the proposed project using field measurements and projected transportation noise levels, identifying appropriate noise mitigation measures as applicable. The feasibility and effectiveness of the proposed noise mitigation measures should be substantiated by the results of the acoustical calculations and/or field tests. Visual/aesthetic feasibility of the proposed noise mitigation measures must be addressed.

October 4, 2006

R06-012; S06-036

# ATTACHMENT C Hydrology & Transportation

## Stormwater Management Plan (SWMP)

The project requires a Priority Project SWMP. Please submit according to the template available at <a href="http://www.sdcounty.ca.gov/dpw/watersheds/pubs/susmp-appendix\_c.pdf">http://www.sdcounty.ca.gov/dpw/watersheds/pubs/susmp-appendix\_c.pdf</a>.

### Drainage Study

Submit a CEQA level drainage study to address improvements to on- and off-site grading, paving and drainage improvements to the satisfaction of the Director of Public Works. Guidelines for preliminary hydrology/drainage study submittals may be found at: <a href="http://www.sdcounty.ca.gov/dpw/watersheds/land\_dev/drainage.html">http://www.sdcounty.ca.gov/dpw/watersheds/land\_dev/drainage.html</a>.

Pending evaluation and approval of the project's SWMP and CEQA level preliminary drainage study and grading plans, further improvements may be required to the surrounding area as mitigation for drainage impacts caused by this project.

### Traffic Study

The project proposes a rezone which would represent a change in anticipated traffic. A CEQA level traffic study is required. Pending evaluation and approval of the traffic report further improvements may be required to the surrounding roads and/or road intersections as part of mitigation for traffic impacts caused by this project. Traffic signals and or signal fees may be required.

# DPW PRELIMINARY DRAFT REQUIREMENTS

THE FOLLOWING DPW PRELIMINARY DRAFT COMMENTS ARE BASED ON AN OFFICE REVIEW FOR R06-012 & S06-036 AND MAY BE REVISED UPON FURTHER REVIEW AND INPUT FROM OTHER AGENCIES.

Pursuant to the Zoning Ordinance and Board of Supervisors Policy I-17, the applicant for any zone reclassification is required to provide those public improvements and facilities (road improvements, drainage, sewage, fire protection, or other public facilities and improvements), and the lands, easements and right-of-way necessary to make the property suitable for use of proposed zoning classification, and such elements shall be required to be in-place, or provisions made for these, before the property is reclassified. The project must include plans and documents demonstrating proposed public access and facilities required for the proposed use and including: public access (showing grading and improvements and all necessary rights-of-way and easements or demonstrated ability to acquire these), Storm Water Management Plan, and CEQA level preliminary grading plans and drainage plans for road, drainage, and utility improvements.

This project is subject to the Centerline Ordinance as per Section 51.506(a). The applicant must initiate the centerline review process with the Building Official (in the Department of Planning and Land Use) and DPW as early as possible in order to coordinate departmental requirements and processing time. Requirements may include granting of right-of-way, irrevocable offers of dedication, relinquishment of access rights, traffic striping, installation of curb, gutter, and sidewalk, road widening, street lights, drainage facilities, no-parking restrictions, and underground placement of utility distribution facilities.

Pending further evaluation of required project drainage and traffic studies, further improvements may be required to the surrounding area as mitigation for drainage impacts caused by this project, and further improvements may be required to roads and/or road intersections, including fair-share contributions toward future installation of traffic signals and fair-share contributions for road and intersection improvements.

Before the zone reclassification can be granted, the applicant shall:

- 1. Revise the plot plan to show the existing right-of-way with dimension to centerline and the ultimate right-of-way as 48 feet from centerline with ultimate building setback limits. Greenfield Drive (SC186) is a Collector Road with Bicycle Lane in the County Circulation Element Road System.
- Improve, or agree to improve and provide security for, on- and off-site access roads and as required to serve the site and to mitigate project impacts as determined by the project Traffic Study, to and along the project frontage in accordance with Public Road Standards to graded and improved widths

appropriate to the proposed multifamily use from an existing publicly maintained road. Provide any necessary asphaltic concrete (A.C.) pavement over approved base pavement, driveway, curb & gutter, and concrete sidewalk and street lights at the project fronting Greenfield Road. All of the above shall be to the satisfaction of the Director of Public Works.

- Obtain approval for the design of all driveways and turnarounds according to San Diego County Design Standards & San Diego County Public Road Standards to the satisfaction of the East County Fire Protection District and the Director of Public Works.
- 4. Dedicate right-of-way for public roads required to serve the site and as required for project impacts per the project traffic study and Public Roads Standards to the satisfaction of the Director of Public Works.

Any offer of dedication or grant of right-of-way shall be free of any burdens or encumbrances which would interfere with the purposes for which the dedication or offer of dedication is required at the time of recordation of any subsequent parcel map or subdivision map filed on the property or the affected utility company/district shall enter into a joint use agreement with the County of San Diego to the satisfaction of the County of San Diego, Director of Public Works.

- A. Prior to obtaining any building permits pursuant to this Site Plan, the applicant shall furnish the Director of Planning and Land Use a letter from the Director of Public Works stating that the following conditions have been completed to that department's satisfaction:
  - 1. Complete that portion of a centerline ordinance project required prior to issuance of building permits.
  - 2. Obtain a grading permit, required prior to commencement of the grading, when quantities exceed 200 cubic yards of material and/or cuts or fills of 8' or more per criteria of Section 87.202 of the County Code.
  - 3. Provide a flood-free building site for the proposed facility to the satisfaction of the Director of Public Works.
  - 4. Design project driveway(s) according to San Diego County Design Standards & San Diego County Public Road Standards and approved to the satisfaction of the Director of Public Works.
  - 5. Obtain a Construction Permit from the Department of Public Works for any work within the County right-of-way. DPW Construction/Road right-of-way Permits Services Section should be contacted at (858) 694-3275 to

coordinate departmental requirements. Also, before trimming, removing or planting trees or shrubs in the County Road right-of-way, the applicant must first obtain a permit to remove, plant or trim shrubs or trees from the Permit Services Section.

- Obtain an Encroachment Permit from the Department of Public Works for any and all proposed/existing facilities within the County right-of-way.

  NOTE: At the time of construction of future road improvements, the proposed/existing facilities shall be relocated at no cost to the County, to the satisfaction of the Director of Public Works.
- 7. Show the future alignment of Greenfield Drive (SC1860) as a Collector Road with Bike on the Circulation Element of the County General Plan. Show the ultimate right-of-way and the ultimate building setback limits. NOTE: At the time of the construction of such future improvements, any proposed facilities shall be relocated at the sole cost of the applicant, to the satisfaction of the Director of Public Works.
- 8. Show lines of inundation to the limits of the 100-year flood along the watercourse, which flows through the property, labeled "Subject To Inundation By The 100-Year Flood" on the Site Plan. This pertains to watersheds having an area of twenty-five (25) or more acres.
- 9. Show an open space easement for drainage granted to the County of San Diego for the watercourse, which flows through the property. This pertains to watersheds having areas of one (1) square mile or more.
- B. Prior to occupancy or use of the premises pursuant to this Site Plan, the applicant shall furnish the Director of Planning and Land Use, along with request for final inspection, a letter from the Director of Public Works stating that the following conditions have been completed to that department's satisfaction:
  - Authorize Special Districts to transfer the property into Zone "A" of the San Diego County Street Lighting District without notice or hearing to maintain existing street lights and pay the cost to process such transfer.
  - 2. Have a registered civil engineer, a registered traffic engineer, or a licensed land surveyor provide a certified signed statement that physically, there is a minimum unobstructed sight distance in both directions along Greenfield Drive (SC1860) as a Collector Road from project driveway, for the prevailing operating speed of traffic on Greenfield Drive. If the lines of sight fall within the existing public road right-of-way, the engineer or surveyor shall further certify that said lines of sight fall within the existing right-of-way and a clear space easement is not required. The engineer or surveyor shall further certify that the sight distance of adjacent driveways

- and street openings will not be adversely affected by this project. These certifications shall be approved to the satisfaction of the Director of Public Works.
- 3. Complete that portion of a centerline ordinance project required prior to occupancy or use of the premises pursuant to this Site Plan.
- C. During the term of the Site Plan, the applicant shall comply with all applicable stormwater regulations at all times. The activities proposed under this application are subject to enforcement under permits from the San Diego Regional Water Quality Control Board (RWQCB) and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance (Ordinance No. 9424 and Ordinance No. 9426) and all other applicable ordinances and standards. This includes requirements for materials and wastes control, erosion control, and sediment control on the project site. Projects that involve areas greater than 1 acra require that the property owner keep additional and updated information onsite concerning stormwater runoff. This requirement shall be to the satisfaction of the Director of Public Works.

# SUMMARY ENVIRONMENTAL COST ESTIMATE AND DEPOSIT SCHEDULE

Project #: R06-012; S06-036 Casa de Verde Name:

Dats:

Estimator. Ed Gowens

TASK	Staff Hours	Management Hours	Admin/Studen Hours
AEIS Completeness/Initial Study	21.6	1.2	2.2
Extended initial Studies	22.B	2.0	1.6
MSCP/BMO or HLP Findings	N/A	N/A	N/A
Negative Deciaration	21.9	3.9	2.7
Environmental Impact Report	'N/A	N/A	N/A
Addendum/Use of Previous CEQA Document	N/A	· N/A	. N/A
Board Policy I-119 Review	N/A	N/A	N/A
TOTAL LABOR HOURS	66.3	6.0	6:5
Charge Rates (\$/nour)	S 146.00	\$ 181.00	\$ 55.00
Subtotal - County Labor Costs*		. [	\$ 11,100
Fish and Game Fees**	 		N/A
TOTAL ESTIMATED COST (Environmental)			\$ 11,100

### **DEPOSIT SCHEDULE**

Environmental Daposits already paid	ક	5.330.
Submit Immediately or Upon Next Submittal, as Appropriate	S	5,770
Submit Immediately Prior to Public Review		N/A
Fish and Game Fees		N/A
TOTAL DEPOSITS (Environmental)	\$	11,100

This is an estimate of County staff time and costs related to Environmental processing only.

Estimates do not include any of the applicant's consultant costs nor County special graphics charges.

- Labor Cost Subtotal is rounded to the passest \$100.

\*\* - Fish and Game fees are collected by the County on behalf of the California Dept. of Fish and Game immediately prior to public review. GENERAL ASSUMPTIONS:

There will be Extended initial Studies Required.

The project will be able to be completed using a Negative Declaration.

MSCP/BMO or HLP Findings are not required or HLP Fee has already been paid.

There may be substantial changes in this estimate if any of the following occur:

- The above general assumptions prove incorrect, especially if an EIR is deemed to be required;
- Applicant does not meet turnaround times;
- It takes more or less than three Iterations to obtain an adequate EIR or Extended Study (if applicable);
- Previously unknown public controversy occurs;
- Recirculation of the ND or EIR for public review is required;
- Your project is appealed to a hearing body for any reason.

P/BMO/HLP Fector, N/A

# ESTIMATED PROCESSING SCHEDULE

Date Schedule Produced/Revised: Staff Completing Schedule: Decision-Making Body: Project Number: Project Name:

Casa de Verde Apartments R06-012; S06-036 Ed Gaveins

Planning Commission and Board of Supervisors 10/4/2006

	A PERSONAL PROPERTY.
	1

		Estimated	Actual
TASICACTIVITY	Estimated	Completion	Completion
	Duralion	Date	Date
APPLICATION SUBMITTAL			8/3/2006
DPLU reviews for application "completeness", detennines project Issues, costs and schedule	90	97/1/2009	10/4/2006
Applicant Submits 1st Draft Extended Initial Studies	120	2/1/2007	
OPLU Reviews 1st Draft Extended Initial Studies	30	3/5/2007	
Applicant Submits 2nd Draff Extended Initial Studies*	45	411912007	-
DPLU Reviews 2nd Draff Extended Initial Studies	. 72	5/10/2007	
Applicant Submits 3rd Draft Extended Initial Studies".	30	6/11/2007	
DPLU Reviews 3rd Draft Extended Intifal Studies	21	712/2007	
DPLU finalizes Environmental Initial Study and Prepar's Application Amendment Form	23	7123/2007	
Applicant submits Application Amendment form, F&G fees, copies of Extended initial Studies	7	8/6/2007	
DPLU completes, advertises and distributes draft Negative Declaration	21	8/30/2007	
Public review of draft Negative Declaration	20	9/19/2007	
DPLU develops draft condition languaga and mitigation monitoring program	20	10/2/2007	
OPLU reviews public review comments per "Fair Argument Standard", finalizes documentation	10	10/19/2007	
DPLU makes final staff recommendation on the project	7	10/28/2007	
OPLU completes final documents, dockets project and finitial PROJECT HEARING/DECISION	7.7	1/3/2008	

Fotal Estimated Durallon

74 weeks 17.1 months

Bolded lasks are under the control of applicantionsultant. llalicized lasks are completed concurrently with other tasks.

. Task can be eliminated if earlier draft documents are adequate.

Assumptions:

Project will be completed using a Negative Declaration and extended tritlal Studies will be required. Public Comments and Hearing comments will not meet the "Fair Argument" standard requiring an Environmental Impact Report.

Applicant consultant will provide adequate Extended Initial Studies in three iterations.

ApplicanyConsultant will submit all required Information in accordance with the estimated schedule.

The project will not be cantinued by the decision-making body nor appealed. Any Department of Public Works or Department of Environmental Health Issues will be resolved concurrently with the environmental process.

The Healing/Decision date is subject to Decision-Making Body availability and schedute. Dates which fall upon a holiday will have an actual completion date this first business day after such holiday.

# APPENDIX B

Traffic Noise Model (TNM) Data and Results

## **TNM Traffic Data and Results**

### Casa de Verde Apartments

Off-Site N	olse Measurement Conditions and Results
21 Date:	Thursday, November 16 <sup>th</sup> , 2006
Time	11:30 a.m. – 11:45 a.m.
Conditions	Clear skies, winds form the west @ 2 mph, temperature in the high 80's with low humidity
Measured Noise Level	65.5 dBA L <sub>EQ</sub>

	ones	ajita Nobalika	Suenenthali	ic Counting		
Roadwa	ys	Duration	Autos	Medium. Trucks	Heavy Trucks	Total
Greenfield Drive (eastbound)	Measured	15 minutes	75	0	2	77
(Guotaguila)	Overall	60 minutes	300	0	8	308
Greenfield Drive (westbound)	Measured	15 minutes	68	5	5	78
•	Overall	60 minutes	272	20	20	312

Galenated versus Measured Traffic Noise Data						
Receiver	Measured 💎	Calculated 2	Difference	Correction **		
On-Site Location	65.5 dBA L <sub>EQ</sub>	65.3 dBA L <sub>EQ</sub>	0.2 dB	None applied		

### **Current Traffic Reference Information**

- Current traffic ADTs for Greenfield Drive and 1<sup>st</sup> Street were obtained from the San Diego Association
  of Governments (SanDAG) 2000 Traffic Volume Forecast, Series 10, as listed in the Transportation
  Forecast Information Center on the SanDAG website at <a href="https://www.sandag.com">www.sandag.com</a>.
- Current truck percentages for all roadways were obtained based on neighboring and surrounding land use, roadway classification, and our professional experience during on-site observations.

### Future Traffic Reference Information

- Future (year 2030) traffic ADT for 1<sup>st</sup> Street was obtained from the San Diego Association of Governments (SanDAG) 2030 Traffic Volume Forecast, Series 10, as listed in the Transportation Forecast Information Center on SanDAG website at <a href="www.sandag.com">www.sandag.com</a>.
- Future (year 2030) traffic ADT and road classification for 1<sup>st</sup> Street was obtained from the "Board of Supervisors Hearing August 2, 2006: Proposed Changes to Circulation Element Road Network and Framework" located on C-194, CE Road Segment 31D www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/pubs/pc\_jul06/c\_lakeside.pdf

 The same truck percentages for current traffic were used for future (year 2030) truck traffic percentages on all roadways.

	Guran (2000) Overall matternormation:					
	Speed	Speed: Truck Percentage (%) and AWT.				
Roadway Name	Limit (mph):	Total %	· Auto ·	Medium Truck	Heavy Truck	
Greenfield Drive	45	100%	95.00%	3.00%	2.00%	
		10,000	551	17	12	
1st Street	45	100%	98.00%	1.50%	0.50%	
.5.5.000		6,000	341	5	2	

Fitting (2030) Overall literific Information						
	Truck Percentage (%) and AWT					
	Limit	Total %		Medium		
Roadway Name	(mph)	AWT	Auto 🙏	Truck	Heavy-Truck	
Greenfield Drive	45	100%	95.00%	3.00%	2.00%	
		10,680	588	19	12	
1st Street	45	100%	98.00%	1.50%	0.50%	
100 000		10,000	568	9	3	

# **CNEL Adjustment Calculation Sheet for TNM Results**

	(धान्याः दिवस्यविक्रा	Miselevei	
Receiver identification	TNM Result (Leq)	Adjustment (dB)	CNEL
Measured Location	65.4	2.0	67.4

	निर्माणेल (२०६०) ज्वालगृहाल	divoreteval	
Receiver Identification	TNM Result (Leg)	Adjustment (dB)	CNEL
Measured Location	65.6	2.0	67.6

ઉપાતાના હામાં મામાર (2080) હતાના ત્રાહ્ય પ્રદેશ ઉપાતાના						
Receiver Identification TNM Result (Leg) Adjustment (dB) CNEL CNEL						
55 CNEL	53.0	. 2.0	55.0			
60 CNEL	58.0	2.0	60.0			

Gurrent Calculated Traffic Noise Impacts on Building Facades											
Receiver	Receiver Location	Level	TNM Result (Leq)	Adjustment (dB)	Traffic CNEL						
R-1	North Façade	1	55.1	2.0	57.1						
R-2	West Façade - North	1	47.6	2.0	49.6						
R-3	West Façade - South	1	43.7	2.0	45.7						
R-4	South Façade	1	39.5	2.0	41.5						
R-5	East Façade - South	1	46.0	2.0	48.0						
R-6	East Façade - North	1	49.6	2.0	51.6						
R-7	North Façade	2	56.2	2.0	58.2						
R-8	West Façade - North	2	47.0	2.0	49.0						
R-9	West Façade - South	2	44.2	2.0	46.2						
R-10	South Façade	2	45.5	2.0	47.5						
R-11	East Façade - South	2	50	2.0	52.0						
R-12	East Façade - North	2	50.5	2.0	52.5						

Gurrent Galenlated Frathic Noise Impacts on Outdoor Use Areas										
Receiver	Receiver Location	TNM Result (Leq)	Adjustment (dB)	Traffic@NEL.						
R-1	West Deck - North	49.4	2.0	51.4						
R-2	Community Court Yard	47.4	2.0	49.4						
R-3	West Deck - South	44.1	2.0	46.1						
R-4	South Private Yard - West	40.2	2.0	42.2						
R-5	South Private Yard - East	43.6	2.0	45.6						
R-6	East Private Yard - South	46.4	2.0	48.4						
R-7	East Private Yard - Central	47.9	2.0	49.9						
R-8	East Private Yard - North	54.4	2.0	56.4						





Mark Sturino

Project Number Project Name Run Title A61114N1

Casa de Verde Apartments

Calibration to On-site Measurement

Client Name

Attention

J.R.E. Partners, LLC Joyce A. Peterson

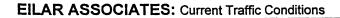
Roadways					respective to the second		Points				
				Coordin	ates (pav	ement)		Flow Contr	rol	Segm	ent
Name	Width	Name	No.	X	у	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?
	ft	<u> </u>		ft	ft	ft	<u> </u>	mph	%		
Greenfield Dr EB	33	point2	2	-500	21.5	466				Average	
		point18	18	-303.1	21.5	470				Average	
		point33	33	-285.1	21.5	.470					
Greenfield Dr WB"	33	point32	32	-285.1	54.5	470	Signal	0	100	Average	
		point17	17	-303.1	54.5	470				Average	
		point3	3	-500	54.5	466					
1st St NB"	18	point24	24	-285.1	-618	469				Average	
		point25	25	-285.1	21.5	470				Average	
		point26	26	-285.1	54.5	470				Average	
		point5	5	-285.1	500	479	L				
1st St SB"	18	point8	8	-303.1	500	479				Average	
		point13	13		54.5	470				Average	
		point14	14	-303.1	21.5	470	1			Average	
		point15	15	-303.1	-618	469					
Greenfield Dr EB 2"	12	point29	29	-285.1	21.5		Signal	0	100	Average	
		point28	28	500	21.5	490					
Greenfield Dr WB 2"	12	point31	31	500	54.5	490				Average	
		point30	30	-285.1	54.5	470	L				

Roadways		Points										
							Segr	nent				
Name	Name	No.	Aut		Mtru	cks	Htru	cks	Bus	es	Motoro	cycles
Ivalle	ivaine	110.	Volume	Speed								
·			veh/hr	mph								
Greenfield Dr EB	point2	2	300	35	0	0	8	35	0	0	0	0
	point18	18	300	35	0	0	8	35	0	0	0	0
	point33	33				·						
Greenfield Dr WB"	point32	32	272	35	20	35	20	35	0	0	0	0
	point17	17	272	35	20	35	20	35	0	0	0	0
	point3	3										
1st St NB"	point24	24	0	0	0	0	0	0	0	0	0	0
	point25	25	0	0	0	0	0	0	. 0	0	0	0
	point26	26	0	0	0	0	0	. 0	0	0	0	0
	point5	5										
1st St SB"	point8	8	0	0	0	0	0	0	0	0	0	0
	point13	13	0	0	0	0	0	0	0	0	0	0
	point14	14	0	0	0	0	0	0	0	0	0	0
	point15	15										
Greenfield Dr EB 2	point29	29	300	35	0	0	8	35	0	0	0	0
	point28	28										
Greenfield Dr WB 2	point31	31	272	35	20	35	20	35	0	0	0	0
	point30	30										

Barriei	s			<u> </u>		······································		Points	<del></del>				
		If be	erm			C	oordinate	s				ment	
									Height	Segm	ent he	eight	
Name	Туре	top	run:	Name	No.	x	.,	7	at point		tubatio	on	On
Ivaille	Type	width	rise	IVallic	140.	^	у	Z	at point	incre-			Struct?
											#Up	# Dn	Suuct
·		ft	ft:ft			ft	ft	ft	ft	ft			
West Neighbor	W			point7	7	-10	-60	475					
				point6	6	-66	-60	475	30				
				point5	5	-66	-224	472	30			L	I
				point4	4	-123	-224	472	30				
				point3	3	-123	-285	472	30				
				point2	2	-10	-285	472	30	0	0	0	
				point1	1	-10	-60	475	30				
Far West"	W			point12	12	411	-30	488	30				
				point11	11	411	-294	482	30				
				point10	10	500	-294	482	30				
				point9	9	500	-30	488	30		0	0	
				point8	8	411	-30	488	30				
Far East"	W			point17	17	-200	-20	472	30				
				point16	16	-132	-20	472	30		0		
				point15	15	-132	-295	469	30				
				point14	14	-200	-295	469			0	0	
				point13	13	-200	-20	472	30				
Garage"	W			point26	26	59	81	482	30				
				point25	25	103	81	482	30				
				point24	24	103	191	482	30				
				point23	23	-88	191	478	30				
				point22	22	-88	81	478	30			<u> </u>	
				point21	21	-44	.81	479					
				point20	20	-44	162	479	30				
				point19	19	59	162	481	30		.0	0	
				point18	18	59	81	482	30				
1st and Greenfield"	W			point30	30	-103	81	475	20	. 0		0	
	.			point29	29	-103	235	475	20	0			
				point28	28	-235	235	475					
				point27	27	-235	81	475	20	0	0	0	
				point31	31	-103	81	475	20				
East Neighbor"	W			point36	36	82	-50	479	20				
				point35	35	82	-102	479					
				point34	34	184	-102	479	20				
				point33	33	184	-50	479	20		0	0	
				point32	32	82	-50	479	20				

Building	Rows			Poir	nts				
Name	Average	Building		Coordinates (ground)					
ivaille	Height	Percentage	No.	×	y	. Z			
	ft	%		ft	ft	ft			
Building2	25	80	1	-237.3	-344.6	469.0			
			2	490.6	-344.6	480.0			
			3	490.6	-584.6	480.0			
			4	-232.0	-584.6	469.0			
			5	-234.6	-352.6	469.0			

	Receivers									
			Coord	linates (pav	ement)		Calculated Laeq 1hr			
Name	No.	No. of Dwelling Units	x	у	z	Height above ground	With Barrier	Without Barrier	Noise Reduction	
			ft	ft	ft	ft.	dBA	dBA	dBA	
On-Site Location	1	1	33	-30	477	5	65.3	65.3	0	





Run Title

Mark Sturino

Project Number Project Name

A61114N1

Casa de Verde Apartments Current Traffic Condition

Client Name

J.R.E Partners, LLC Joyce A. Peterson Attention

Roadways							Points				·····
				Coordin	ates (pav	ement)		Flow Conti	rol	Segm	ent
Name	Width	Name	No.	x	у	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?
	ft			ft	ft	ft	1	mph	%		
Greenfield Dr EB	33	point2	. 2	-500.0	21.5	466.00				Average	
		point18	18	-303.1	21.5	470.00				Average	
		point33	33	-285.1	21.5	470.00					
Greenfield Dr WB"	33	point32	32	-285.1	54.5	470.00	Signal	. 0	100	Average	
		point17	17	-303.1	54.5	470.00				Average	
		point3	3	-500.0	54.5	466.00					
1st St NB"	18	point24	24	-285.1	-618.0	469.00				Average	
		point25	25	-285.1	21.5	470.00				Average	
		point26	26	-285.1	54.5	470.00				Average	
		point5	5	-285.1	500.0	479.00					
1st St SB"	18	point8	8	-303.1	500	479				Average	
		point13	13	-303.1	54.5	470				Average	
		point14	14	-303.1						Average	
•		point15	15	-303.1	-618	469					
Greenfield Dr EB 2"	12	point29	29	-285.1	21.5	470	Signal	0	100	Average	
		point28	28	500	21.5	490					
Greenfield Dr WB 2"	12	point31	31	500	54.5	490				Average	
		point30	30	-285.1	54.5	470					

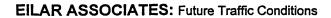
Roadways	Points												
							Segr	nent					
Name	Name	No.	Aut	os	Mtru	cks	Htru		Bus	es	Motoro	ycles	
Name	Ivaille	140.	Volume	Speed									
			veh/hr	mph									
Greenfield Dr EB	point2	2	276	45	8	45	6	45	.0	0	0	0	
	point18	18	276	45	8	45	6	45	0	0	0	0	
	point33	33											
Greenfield Dr WB"	point32	32	275	45	9	45	6	45	0	0	. 0	0	
	point17	17	275	45	9	45	6	45	0	0	0	0	
	point3	3											
1st St NB"	point24	24	170	45	3	45	1	45	0	0	0	0	
	point25	25	170	45	3	45	1	45	0	0	0	0	
	point26	26	170	45	3	45	1	45	0	0	0	0	
	point5	5											
1st St SB"	point8	8	171	45	2	45	1	45	0	0	0	0	
	point13	13	171	45	2	45	1	. 45	0	0	0	0	
	point14	14	171	45	2	45	1	45	0	0	0	0	
	point15	15											
Greenfield Dr EB 2	point29	29	276	45	8	45	6	45	0	0	0	0	
	point28	28											
Greenfield Dr WB 2	point31	31	275	45	9	45	6	45	0	0	0	. 0	
	point30	30											

Barrie	rs			·			· · · · · · · · · · · · · · · · · · ·	Points					
		If be	erm			C	oordinate				Seg	ment	
									Height	Segm	ent he		
Name	Туре	top	run:	Name	No.	x	.,	_	at point	per	tubatio	on	On
Name	Type	width	rise	Name	140.	^	У	z	at point	Incre-			Struct?
					l					ment	#Up	# Dn	Structs
		ft	ft:ft			ft	ft	ft	ft	ft			
West Neighbor	W			point7	7	-10	-66	475	30	0	0	0	
				point6	6	-66	-66	475	30	0		0	
				point5	5	-66	-224	472	30	0		0	
·				point4	4	-123	-224	472	30	0	0	0	
				point3	3	-123	-285	472	30	0		0	
				point2	2	-10	-285	472	30	0	0	0	
				point1	1	-10	-66	475	30				
Far West"	W			point12	12	411	-30	488	30	0		0	
				point11	11	411	-294	482	30	0	0	0	
				point10	10	500	-294	482	30	0	0	0	
				point9	9	500	-30	488	30	0	0	0	
				point8	8	411	-30	488	30				
Far East"	W			point17	17	-200	-20	472	30	0	0	0	
				point16	16	-132	-20	472	30	0	0	0	
				point15	15	-132	-295	469	30	0	0	0	
				point14	14	-200	-295	469	30	0	0	0	
				point13	13	-200	-20	472	30				
Garage"	W			point26	26	59	81	482	30	0	0	0	
				point25	25	103	81	482	30	0	0	0	
				point24	24	103	191	482	30	0	0	0	
	.			point23	23	-88	191	478	30	0	0	0	
				point22	22	-88	81	478	30	0	0	0	
				point21	21	-44	81	479	30	0	0	.0	
				point20	20	-44	162	479	30	0	0	0	
				point19	19	59	162	481	30	0	0	0	
				point18	18	59	81	482	30				
1st and Greenfield"	W			point30	30	-103	81	475	20	0	0	0	
				point29	29	-103	235	475	20	0	0	0	
				point28	28	-235	235	475	20	0	0	0	
				point27	27	-235	81	475	20	0	0	0	
				point31	31	-103	81	475	20				
East Neighbor"	W			point36	36	82	-56	479	20	0	0	0	
				point35	35	82	-102	479	20	0	0	0	
				point34	34	184	-102	479	20		0	0	
				point33	33	184	-56	479	20	0	0	0	
				point32	32	82	-56	479	20				

Buildi	ing Rows			Po	ints	
Name	Average	Building		Coor	dinates (gro	und)
Name	Height	Percentage	No.	×	у	z
	ft	%		ft	ft	ft
Building2	25	80	1	-237.3	-344.6	469.0
			2	490.6	-344.6	480.0
			3	490.6	-584.6	480.0
			4	-232.0	-584.6	469.0
			5	-234.6	-352.6	469.0

	Rece	ivers				Sound Levels			
			Coord	inates (pave	ement)	·		lated Laed	
Name	No.	No. of Dwelling Units	x	у	· Z	Height above ground	With Barrier	Without Barrier	Noise Reductio n
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1	1	33.00	-30.00	477.00	5.00	65.4	65.4	0.0
0-5"	2	1	0.00	-5.00	477.00		68.0	68.0	0.0
16-5"	3	1	16.00	-5.00	477.00		68.0	68.0	0.0
32-5"	4	1	32.00	-5.00	477.00		68.0	68.0	0.0
48-5"	5	1	48.00	-5.00	477.00		68.0	68.0	0.0
64-5" 0-25"	7	1	64.00 0.00	-5.00	477.00		68.0	68.0	0.0
16-25"	8	1	16.00	-25.00 -25.00	. 477.00 477.00		65.8 65.8	65.8 65.8	0.0
32-25"	9	1	32.00	-25.00	477.00		65.8	65.8	0.0
48-25"	10	1	48.00	-25.00	477.00		65.8	65.8	0.0
64-25"	11	1	64.00	-25.00	477.00		65.7	65.7	0.0
0-45"	12	1	0.00	-45.00	477.00		64.5	64.5	0.0
16-45"	13	1	16.00	-45.00	477.00		64.5	64.5	0.0
32-45"	14	1	32	-45	477	5	64.4	64.4	0.0
48-45"	15	1	48	-45	477	5	64.4	64.4	0.0
64-45"	16	1	64	-45	477	5	64.3	64.3	0.0
0-65"	17	1	0	-65	477	5	63.2	63.2	0.0
16-65"	18	1	16	-65	477	5	63.2	63.2	0.0
32-65"	19	1	32	-65	477	5	63.3	63.3	0.0
48-65"	20	1	48	-65	477	5	63.3	63.3	0.0
64-65" 0-85"	21	1	64	-65 -85	477	5	63	63	0.0
16-85"	23	1	16	-05 -85	477 477	5	60.4	60.4	0.0
32-85"	24	1	32	-85 -85	477	5	61.3 61.6	61.3 61.6	0.0
48-85"	25	1	48	-85	477	5	61.4	61.4	0.0
64-85"	26	1	64	-85	477	5	60.8	60.8	0.0
0-105"	27	1	0	-105	477	5	58.5	58.5	0.0
16-105"	28	1	16	-105	477	5	59.2	59.2	0.0
32-105"	29	1	32	-105	477	5	59.5	59.5	0.0
48-105"	30	1	48	-105	477	5	59.5	59.5	0.0
64-105"	31	1	64	-105	477	5	59.1	59.1	0.0
0-125"	32	1	0	-125	477	5	57	57	0.0
16-125"	33	1	16	-125	477	5	57.5	57.5	0.0
32-125"	34	1	32 48	-125	477	5	57.8	57.8	. 0.0
48-125" 64-125"	36	1	64	-125 -125	477	5	57.8	57.8	0.0
0-145"	37		0		477 477	5 5	57.5 55.7	57.5 55.7	0.0
16-145"	38	1	16	-145	477	5	56.1	56.1	0.0
32-145"	39	1	32	-145	477	5	56.4	56.4	0.0
48-145"	40	1	48	-145	477	5	56.4	56.4	0.0
64-145"	41	1	64	-145	477	5	56.2	56.2	0.0
0-165"	42	1	0	-165	477	5	54.6	54.6	0.0
16-165"	43	1	16	-165	477	5	54.9	54.9	0.0
32-165"	44	1	32	-165	477	5	55.2	55.2	0.0
48-165"	45	1	48	-165	477	5	55.3	55.3	0.0
64-165"	46	1	64	-165	477	5	55.3	55.3	0.0
0-185" 16-185"	47	1	0 16	-185 -185	477 477	5	53.7 54.1	53.7	0.0
32-185"	49	1	32	-185	477	5	54.1 54.4	54.1 54.4	0.0
48-185"	50	1	48	-185	477	5	54.6	54.6	0.0
64-185"	51	1	64	-185	477		54.7	54.7	0.0
0-205"	52	1	0	-205	477	5	53.1	53.1	0.0
16-205"	53	1	16	-20,5	477	5	53.5	53.5	0.0
32-205"	54	1	32	-205	477	5	53.8	53.8	0.0
48-205"	55	1	48	-205	477	5	54	54	0.0
64-205"	56	1	64	-205	477	5	54.2	54.2	0.0
0-225"	57	1	0	-225	477	5	52.7	52.7	0.0
16-225"	58	1	16	-225	477	5	53	53	0.0
32-225"	59	1	32	-225	477	5	53.3	53.3	0.0
48-225"	60	1	48	-225	477	5	53.6	53.6	0.0

64-225"	61	1	64	-225	477	5	53.8	53.8	0.0
0-245"	62	1	0	-245	477	5	52.2	52.2	0.0
16-245"	63	1	16	-245	477	5	52.6	52.6	0.0
32-245"	64	1	32	-245	477	5	52.9	52.9	0.0
48-245"	65	1	48	-245	477	5	53.2	53.2	0.0
64-245"	66	1	64	-245	477	5	53.4	53.4	0.0
0-265"	67	1	0	-265	477	5	51.9	51.9	0.0
16-265"	68	1	16	-265	477	5	52.3	52.3	0.0
32-265"	69	1	32	-265	477	5	52.6	52.6	0.0
48-265"	70	1	48	-265	477	5	52.8	52.8	0.0
64-265"	71	1	64	-265	477	5	53.1	53.1	0.0





Mark Sturino

**Project Number** 

A61114N1

Project Name Run Title Casa de Verde Apartments

**Client Name** 

J.R.E. Partners, LLC Joyce A. Peterson

Future Traffic Condition

Attention

Roadways					-		Points		1 10 to 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
				Coordin	ates (pav	ement)		Flow Cont	rol	Segm	ent
Name	Width	Name	No.	x	у	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?
	ft			ft	ft	ft		mph	%		·
Greenfield Dr EB	33	point2	2	-500.0	21.5	466.00				Average	
		point18	18	-303.1	21.5	470.00				Average	
		point33	33	-285.1	21.5	470.00					
Greenfield Dr WB"	33	point32	32	-285.1		470.00		0	100	Average	
		point17	17	-303.1		470.00				Average	
		point3	3	-500.0		466.00					
1st St NB"	18	point24	24	-285.1	-618.0	469.00				Average	
		point25	25	-285.1		470.00				Average	
		point26	26	-285.1	54.5	470.00				Average	
		point5	5	-285.1		479.00					
1st St SB"	18	point8	8	-303.1		479.00				Average	
		point13	13	-303.1		470.00				Average	
		point14	14	-303.1		470.00				Average	
		point15	15	-303.1		469.00					
Greenfield Dr EB 2"	12	point29	29	-285.1	21.5		Signal	0	100	Average	
		point28	28	500	21.5						
Greenfield Dr WB 2"	12	point31	31	500	54.5					Average	
		point30	30	-285.1	54.5	470				1	

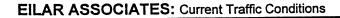
Roadways		Points											
							Segr	nent					
Name	Name	No.	Aut	os	Mtru	cks	Htru	cks	Bus	ses	Motoro	cycles	
Name	Name	140.	Volume	Speed									
			veh/hr	mph									
Greenfield Dr EB	point2	2	294	45	10	45	6	45	0	0	0	0	
	point18	18	294	45	10	45	6	45	0	0	0	0	
	point33	33											
Greenfield Dr WB"	point32	32	294	45	9	45	6	45	0	0	0	0	
	point17	17	294	45	9	45	6	45	0	0	0	0	
	point3	3				•							
1st St NB"	point24	24	284	45	4	45	2	45	0	0	0	0	
	point25	25	284	45	4	45	2	45	0	0	0	0	
	point26	26	284	45	4	45	2	45	0	0	0	0	
·	point5	5											
1st St SB"	point8	8	284	45	5	45	1	45	0	0	0	0	
	point13	13	284	45	5	45	1	45	0	0	0	0	
	point14	14	284	45	5	45	1	45	0	0	0	0	
	point15	15											
Greenfield Dr EB 2	point29	29	294	45	10	45	6	45	0	0	0	0	
	point28	28											
Greenfield Dr WB 2	point31	31	294	45	9	45	6	45	0	0	0	0	
	point30	30											

Barrie				<del></del>		Points							
		If be	em			C	oordinate	s			Seg	ment	
	l								Height	Segm	ent he		
Name	Туре	top	run:	Name	No.		., 1	_	at point	per	tubatio	on	On
Name	Type	width	rise	ivanie	140.	×	У	Z	at point	Incre-			Struct?
				•						ment	#Up	# Dn	Struct?
		ft	ft:ft			ft	ft	ft	ft	ft			
West Neighbor	W			point7	7	-10	-66	475	30	0	0	0	
* (** ** ** ** ** ** ** ** ** ** ** ** *	-			point6	- 6	-66	-66	475	30	. 0	0	0	
				point5	5	-66	-224	472	30	0		0	
				point4	4	-123	-224	472	30	0	0	0	
·				point3	3	-123	-285	472	30	0	0	0	
				point2	2	-10	-285	472	30	0	0	0	
				point1	1	-10	-66	475	30				
Far West"	W			point12	12	411	-30	488	30	0		0	
·				point11	11	411	-294	482	30	0	0	0	
				point10	10	500	-294	482	30	0	0	0	
				point9	9	500	-30	488	30	0	0	0	
				point8	8	411	-30	488	30				
Far East"	W			point17	17	-200	-20	472	30	0	0	0	
				point16	16	-132	-20	472	30	0	0	0	
				point15	15	-132	-295	469	30	0	0	0	
				point14	14	-200	-295	469	30	0	0	0	
				point13	13	-200	-20	· 472	30				
Garage"	W			point26	26	59	81	482	30	0	0	0	
				point25	25	103	81	482	30	0	0	0	
				point24	24	103	191	482	30	0	0	0	
				point23	23	-88	191	478	30	0	0	0	
				point22	22	-88	81	478	30	0	0	0	
				point21	21	-44	81	479	30	0	0	0	
				point20	20	-44	162	479	30	0	0	0	
				point19	19	59	162	481	30	0	0	0	
				point18	18	59	. 81	482	30				
1st and Greenfield"	W			point30	30	-103	81	475	20	0	0	0	
				point29	29	-103	235	475	20	0	0	0	
				point28	28	-235	235	475	20	0	0	0	
				point27	27	-235	81	475	20	0	0	0	
				point31	31	-103	81	475	20				
East Neighbor"	W			point36	36	82	-56	479	20	0	0	0	
				point35	35	82	-102	479	20	0	0	0	
				point34	34	184	-102	479	20	0	0	0	
				point33	33	184	-56	479	20	0	0	. 0	
				point32	32	82	-56	479	. 20				

Building R	ows		Points						
Name	Average	Building		Coor	dinates (gro	und)			
Hame	Height	Percentage	No.	х	у	Z			
·	ft	%		ft	ft	ft			
Building2	25	80	1	-237.3	-344.6	469.0			
			2	490.6	-344.6	480.0			
			3	490.6	-584.6	480.0			
			4	-232.0	-584.6	469.0			
			5	-234.6	-352.6	469.0			

Building R	ows			Poi	nts	
Name	Average	Building		Coor	dinates (gro	und)
TValle.	Height	Percentage	No.	x	у	. Z
	ft	%		ft	ft	ft
Building2	25	80	1	-237.3	-344.6	469.0
	<u> </u>		2	490.6	-344.6	480.0
			3	490.6	-584.6	480.0
			4	-232.0	-584.6	469.0
			5	-234.6	-352.6	469.0

		Recei	vers				Sound Levels				
			Coord	inates (pav	ement)		Calculated Laeq 1hr				
Name	No.	No. of Dwelling Units	×	у	z	Height above ground	With Barrier	Without Barrier	Noise Reduction		
			ft	ft	ft	ft.	dBA	dBA	dBA		
On-Site Location	$-+\tau$	1	33	-30	477	5	65.3	65.3	0		





Run Title

Mark Sturino

A61114N1

Project Number Project Name

Casa de Verde Apartments **Current Traffic Condition** 

Client Name

Attention

J.R.E Partners, LLC Joyce A. Peterson

Roadways							Points				
				Coordin	ates (pav	ement)		Flow Conti	rol	Segm	ent
Name	Width	Name	No.	х	у	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?
	ft			ft	ft	ft		mph	%		
Greenfield Dr EB	33	point2	2	-500.0	21.5					Average	
		point18	18	-303.1	21.5	470.00				Average	
		point33	33	-285.1		470.00					
Greenfield Dr WB"	33	point32	32	-285.1	54.5	470.00	Signal	0	100	Average	<u> </u>
		point17	17	-303.1	54.5	470.00				Average	
		point3	3	-500.0		466.00					
1st St NB"	18	point24	24	-285.1	-618.0	469.00				Average	
		point25	25	-285.1	21.5	470.00				Average	
		point26	26	-285.1	54.5	470.00				Average	
		point5	5	-285.1	500.0						
1st St SB"	18	point8	8	-303.1	500	479				Average	
		point13	13	-303.1	54.5	470				Average	
		point14	14	-303.1	21.5					Average	
•		point15	15	-303.1	-618	469				L	
Greenfield Dr EB 2"	12	point29	29	-285.1	21.5	470	Signal	0	100	Average	
		point28	28	500	21.5	490					<u> </u>
Greenfield Dr WB 2"	12	point31	31	500	54.5					Average	
		point30	30	-285.1	54.5	470					l

Roadways	-					Poi	nts					
							Segr	nent				
Name	Name	No.	Aut	tos	Mtru	icks	Htru		Bus	ses	Motor	cycles
riamo	, tuille	110.	Volume	Speed	Volume	Speed	Volume	Speed				
-	·		veh/hr	mph								3,500
Greenfield Dr EB	point2	2	276	45	8	45	6	45	.0	0	0	0
	point18	18	276	45	8	45	6	45		0		0
	point33	33										<del>                                     </del>
Greenfield Dr WB"	point32	32	275	45	9	45	6	45	0	0	0	0
	point17	17	275	45	9	45	6	45	0	0		
	point3	3										<u>_</u>
1st St NB"	point24	24	170	45	3	45	1	45	0	0	0	0
	point25	25	170	45	3	45	1	45	0	0	0	0
	point26	26	170	45	3	45	1	45	0	0	0	0
	point5	5										
1st St SB"	point8	8	171	45	2	45	1	45	0	0	0	0
	point13	13	171	45	2	45	1	45	0	0	0	0
	point14	14	171	45	2	45	1	45	0	0	0	0
	point15	15										
Greenfield Dr EB 2	point29	29	276	45	8	45	6	45	0	0	0	0
	point28	28										
Greenfield Dr WB 2	point31	31	275	45	9	45	6	45	0	0	0	. 0
	point30	30										

Barrie	rs							Points					
		If be	erm			C	oordinate	s				ment	
									Height	Segm	ent he	eight	
Name	Туре	top	run:	Name	No.	x	.,	z	at point	per	tubatio	on	On
Haile	1,700	width	rise	Marine	'''	^	у	2	at point	incre-			Struct?
											#Up	# Dn	Suucti
I		ft	ft:ft			ft	ft	ft	ft	ft			
West Neighbor	W			point7	7	-10	-66	475	30	0	0	0	
				point6	6	-66	-66	475	30	. 0	0	0	
				point5	5	-66	-224	472	30	0	0	0	
				point4	4	-123	-224	472	30	0	0	0	
				point3	3	-123	-285	472	30	0	0	0	
				point2	2	-10	-285	472	30	0	0	0	
				point1	1	-10	-66	475	30				
Far West"	W			point12	12	411	-30	488	30	0	0	0	
				point11	11	411	-294	482	30	0	0	0	
				point10	10	500	-294	482	30	0	0	0	
				point9	9	500	-30	488	30	0	0	0	
				point8	8	411	-30	488	30				
Far East"	W			point17	17	-200	-20	472	30	0	0	0	
				point16	16	-132	-20	472	30	0	0	0	
				point15	15	-132	-295	469	30	0	0	0	
				point14	14	-200	-295	469	30	0	0	0	
				point13	13	-200	-20	472	30				
Garage"	W			point26	26	59	81	482	30	0	0	0	
				point25	25	103	81	482	30	0	0	0	
				point24	24	103	191	482	30	0	0	0	
				point23	23	-88	191	478	30	0		0	
				point22	22	-88	81	478	30	0		0	
				point21	21	-44	81	479	30	0	0	0	
				point20	20	-44	162	479	30	0	0	0	
				point19	19	59	162	481	30	0	0	0	
***				point18	18	59	81	482	30				
1st and Greenfield"	w			point30	30	-103	81	475	20	0	0	0	
				point29	29	-103	235	475	20	Ō		0	
				point28	28	-235	235	475	20	Ō	0	0	
				point27	27	-235	81	475	20	0		0	
				point31	31	-103	81	475	20				
East Neighbor"	- w			point36	36	82	-56	479	20	0	0	0	
				point35	35	82	-102	479	20	0		0	
				point34	34	184	-102	479	20	0		0	
				point33	33	184	-56	479	20	0		- 0	
			-	point32	32	82	-56	479	20		<del></del>	- 5	

Buildi	ng Rows			Poi	nts	
Name	Average			Coor	dinates (gro	ound)
	Height	Percentage	No.	x	٧	z
	ft	%		ft	ft	ft
Building2	25	80	1	-237.3	-344.6	469.0
			2	490.6	-344.6	
			3	490.6	-584.6	480.0
			4	-232.0	-584.6	469.0
L		l	5	-234.6	-352.6	469.0

		Rece	ivers		** *******		So	ound Level	ls
			Coord	inates (pave	ement)	·	Calcu	lated Laed	1hr
Name	No.	No. of Dwelling Units	x	у	Z	Height above ground	With Barrier	Without Barrier	Noise Reduction
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1		33.00	-30.00	477.00	5.00	65.4	65.4	
0-5"	2	1	0.00	-5.00	477.00		68.0	68.0	
16-5"	3	1	16.00	-5.00	477.00	5.00	68.0	68.0	
32-5"	4		32.00	-5.00	477.00	5.00	68.0	68.0	
48-5" 64-5"	5 6	1	48.00	-5.00	477.00		68.0	68.0	
0-25"	7	1 1	64.00	-5.00	477.00		68.0	68.0	
16-25"	8	1	0.00 16.00	-25.00 -25.00	. 477.00 477.00		65.8 65.8	65.8	
32-25"	9	1	32.00	-25.00	477.00	5.00	65.8	65.8 65.8	
48-25"	10	1	48.00	-25.00	477.00	5.00	65.8	65.8	0.0
64-25"	11	1	64.00	-25.00	477.00	5.00	65.7	65.7	0.0
0-45"	12	1	0.00	-45.00	477.00		64.5	64.5	0.0
16-45"	13	1	16.00	-45.00	477.00	5.00	64.5	64.5	0.0
32-45"	14	1	32	-45	477	5	64.4	64.4	0.0
48-45"	15	1	48	-45	477	5	64.4	64.4	0.0
64-45"	16	1	64	-45	477	5	64.3	64.3	0.0
0-65"	17	1	0	-65	477	5	63.2	63.2	0.0
16-65"	18	1	16	-65	477	5	63.2	63.2	0.0
32-65"	19	1	32	-65	477	5	63.3	63.3	0.0
48-65"	20	1	48	-65	477	5	63.3	63.3	0.0
64-65" 0-85"	21	1 1	64	-65	477	5	63	63	0.0
16-85"	23	1	0 16	-85 -85	477	5	60.4	60.4	0.0
32-85"	24	1	32	-85	477 477	5 5	61.3 61.6	61.3	0.0
48-85"	25	1	48	-85	477	5	61.4	61.6 61.4	0.0
64-85"	26	1	.64	-85	477	5	60.8	60.8	0.0
0-105"	27	1	0	-105	477	. 5	58.5	58.5	0.0
16-105"	28	1	16	-105	477	5	59.2	59.2	0.0
32-105"	29	1	32	-105	477	5	59.5	59.5	0.0
48-105"	30	1	48	-105	477	5	59.5	. 59.5	0.0
64-105"	31	1	64	-105	477	5	59.1	59.1	0.0
0-125"	32	1	0	-125	477	5	57	57	0.0
16-125"	33	1	16	-125	477	5	57.5	57.5	0.0
32-125"	34	1	32	-125	477	5	57.8	57.8	. 0.0
48-125"	35	1	48	-125	477	5	57.8	57.8	0.0
64-125" 0-145"	36	1	64	-125	477	5	57.5	57.5	0.0
16-145"	38	1	0 16	-145 -145	477 477	5	55.7 56.1	55.7	0.0
32-145"	39	1	32	-145	477	5	56.1 56.4	56.1 56.4	0.0
48-145"	40	1	48	-145	477	5	56.4	56.4	0.0
64-145"	41	1	64	-145	477	5	56.2	56.2	0.0
0-165"	42	1	0	-165	477	5	54.6	54.6	0.0
16-165"	43	1	16	-165	477	5	54.9	54.9	0.0
32-165"	44	1	32	-165	477	5	55.2	55.2	0.0
48-165"	45	1	48	-165	477	5	55.3	55.3	0.0
64-165"	46	1	64	-165	477	5	55.3	55.3	0.0
0-185"	47	1	0	-185	477	5	53.7	53.7	0.0
16-185"	48	1	16	-185	477	5	54.1	54.1	0.0
32-185"	49	1	32	-185	477	5	54.4	54.4	0.0
48-185"	50	1	48	-185	477	5	54.6	54.6	0.0
64-185"	51 52	1	64	-185	477	5	54.7	54.7	0.0
0-205" 16-205"	53	1	0 16	-205 -205	477	5	53.1	53.1	0.0
32-205"	54	1	32	-205 -205	477 477	5	53.5	53.5	0.0
48-205"	55	1	48	-205	477	5 5	53.8 54	53.8 54	0.0
64-205"	56	1	64	-205	477	5	54.2	54.2	0.0
0-225"	57	1	0	-225	477	5	52.7	52.7	0.0
16-225"	58	1	16	-225	477	5	53	53	0.0
32-225"	59	1	32	-225	477	5	53.3	53.3	0.0
48-225"	60	1	48	-225	477	5	53.6	53.6	0.0

64-225"	61	1	64	-225	477	5	53.8	53.8	0.0
0-245"	62	1	0	-245	: 477	5	52.2	52.2	0.0
16-245"	63	1	16	-245	477	5	52.6	52.6	
32-245"	64	1	32	-245	477	5	52.9	52.9	
48-245"	65	1	48	-245			53.2	53.2	0.0
64-245"	66	1	64	-245	477	5	53.4	53.4	0.0
0-265"	67	1	0	-265	477	5	51.9	51.9	
16-265"	68	1	16	-265	477	5	52.3	52.3	
32-265"	69	1	32	-265	477	5	52.6	52.6	
48-265"	70	1	48	-265	477	5	52.8	52.8	
64-265"	71	1	64	-265	477	5	53.1	53.1	0.0

# **EILAR ASSOCIATES:** Future Traffic Conditions



Prepared by

Mark Sturino

Project Number Project Name

A61114N1

Run Title

Casa de Verde Apartments

**Future Traffic Condition** 

Client Name Attention

J.R.E. Partners, LLC Joyce A. Peterson

Roadways			-				Points				
				Coordin	ates (pav	/ement)		Flow Cont	rol	Segm	ent
Name	Width	Name	No.	x	у	z	Control Device	Constraint	Percent Vehicles Affected	Pavement Type	
	ft		}	ft	ft	ft	1	mph	%		
Greenfield Dr EB	33	point2	2	-500.0	21.5	466.00				Average	
		point18	18	-303.1	21.5	470.00				Average	
		point33	33	-285.1	21.5	470.00					
Greenfield Dr WB"	33	point32	32	-285.1	54.5	470.00	Signal	0	100	Average	
		point17	17	-303.1	54.5	470.00				Average	
		point3	3	-500.0	54.5	466.00					
1st St NB"	18	point24	24	-285.1	-618.0	469.00				Average	
		point25	25	-285.1	21.5	470.00				Average	
		point26	26	-285.1	54.5	470.00				Average	
		point5	5	-285.1	500.0	479.00				J	
1st St SB"	18	point8	8	-303.1	500.0	479.00				Average	
		point13	13	-303.1	54.5	470.00				Average	
		point14	14	-303.1	21.5	470.00				Average	
		point15	15	-303.1	-618.0	469.00					
Greenfield Dr EB 2"	12	point29	29	-285.1	21.5	470	Signal	0	100	Average	
-2		point28	28	500	21.5	490					
Greenfield Dr WB 2"	12	point31	31	500	54.5	490				Average	
		point30	30	-285.1	54.5	470					

Roadways						Po	inte								
		1	Points Segment												
Name	Name	No.	Au		Mtru	icks	Htru	cke							
	ı		Volume	Speed	Volume		Volume		Bus		Motor	cycles			
Greenfield Dr EB	<del></del>		veh/hr	mph		95000	Voidifie	Speed	Volume	Speed	Volume	Spee			
Orcennela DI EB	point2	2	294	45	10	45	6	45							
	point18	18	294	45		45		45	0	0	0				
Groonfield D. M.D.	point33	33				40	6	45	0	0	0				
Greenfield Dr WB"	point32	32	294	45	9	45									
	point17	17	294	45	9		6	45	0	0	0				
4-4-04-14-11	point3	3				45	6	45	0	0	0				
1st St NB"	point24	24	284	45											
	point25	25	284	45	4	45	2	45	0	0	0				
	point26	26	284	45	4	45	2	45	0	0	0	<del></del>			
	point5	5	207	43	4	45	2	45	0	0	0				
lst St SB"	point8	8	284	45											
	point13	13	284	45	5	45	1	45	0	0	o	0			
	point14	14	284	45	5	45	1	45	0	ol	0				
	point15	15	204	45	5	45	1	45	0	0	0	0			
Greenfield Dr EB 2	point29	29	204							<del>- 4</del>		0			
	point28	28	294	45	10	45	6	45	0	0					
Greenfield Dr WB 2	point31	31	- 004						<del>  </del>		0	0			
	point30	30	294	45	9	45	6	45	0	0	0				
	17-11.100	301								<del></del>		0			

Barr	Points												
		If berm				C	coordinate	s		Segment			
1					1 1				Height	Segment height			
Name	Туре	top	run:	Name	No.	x	, ,	_	at point	per	tubatio	on	On
Name	lighe	width	rise	Name	140.	^	у	Z	at point	incre-			Struct?
									l	ment	#Up	# Dn	Struct?
		ft	ft:ft			ft	ft	ft	ft	ft			
West Neighbor	W			point7	7	-10	-66	475	30	0	0	0	
				point6	6	-66	-66	475	30	0	0	0	
				point5	5	-66	-224	472	30	0	0	0	
				point4	4	-123	-224	472	30	0	0	0	
				point3	3	-123	-285	472	30	0	0	0	
				point2	2	-10	-285	472	30	0	0		
				point1	1	-10	-66	475	30				
Far West"	w			point12	12	411	-30	488	30	0	0	0	
				point11	11	411	-294	482	30	0	0	0	
				point10	10	500	-294	482	30	0	0	0	
				point9	9	500	-30	488	30	0			
				point8	8	411	-30	488	30		Ť		
Far East'	w			point17	17	-200	-20	472	30	0	0	0	
				point16	16	-132	-20	472	30	0	0	0	
				point15	15	-132	-295	469	30	ō	0		
				point14	14	-200	-295	469	30		0		
				point13	13	-200	-20	472	30	<del>                                     </del>			
Garage"	w			point26	26	59	81	482	30	0	0	0	
				point25	25	103	81	482	30	ō	0		
				point24	24	103	191	482	30	0			
				point23	23	-88	191	478	30	0		1	
				point22	22	-88	81	478	30	0	0		
				point21	21	-44	81	479	30		0		
				point20	20	-44	162	479	30	0	0	0	
				point19	19	59	162	481	30	0	0		
				point18	18	59	. 81	482	30	I	-	-	
1st and Greenfield"	w			point30	30	-103	81	475	20	0	0	0	
13t and Greenheid	<del></del>			point29	29	-103	235	475	20	0	0		
				point28	28	-235	235	475	20	0	0	0	
				point27	27	-235	81	475	20	0	0		
				point31	31	-103	81	475	20	<del>                                     </del>	<del>                                     </del>		
East Neighbor"	w			point36	36	82	-56	479	20	0	0	0	
Last Neighbol				point35	35	82	-102	479	20		0		
				point34	34	184	-102	479	20	0	0	0	
				point33	33	184	-102	479	20		0		
				point32	32	82	-56 -56	479	20			<b>⊢</b>	
				pomoz	ا عد	02	-30	4/9			L	لــــــا	

Buildi	ng Rows	Points						
Name	Average			Coordinates (ground)				
	Height	Percentage	No.	x	У	z		
Building2	π	%		ft	ft	ft		
Building2	25	80	1	-237.3	-344.6	469.0		
			2	490.6	-344.6	480.0		
			3	490.6	-584.6	480.0		
			4	-232.0	-584.6	469.0		
			5	-234.6	-352.6	469.0		

Chemiste   Continue   1			Re	ceivers				ll s	ound Leve	s
Name			No of	Coordin	nates (pav	rement)		Calc	ulated Laed	1hr
Con-Site Location	Name	No.	t .	x	v	7				
On-Sire Location 1										Reduction
0.5"	0- 64- 1	-								
18-8" 3 1 1 16 -5 477 5 68.3 68.3 68.3 68.3 68.3 68.3 68.3 68.3										0
32-8"										0
48-8"   5   1   48   -5   477   5   68.3   68.3										0
64-9° 6 1 1 64 -5 477 5 68.3 68.3 68.3 68.3 68.3 69.25° 7 1 1 0 -25 477 5 66.1 66.1 66.1 16.25° 8 1 16.25° 8 1 16.25° 477 5 66.1 66.1 32.25° 9 1 32 -25 477 5 66.6 66 66 32.25° 9 1 32 -25 477 5 66.6 66 66 66 66 66 66 66 66 66 66 66 6								-		0
0-25" 7 1 1 0 -25 477 5 66.1 66.1 66.1 66.1 66.1 66.25" 8 1 1 6 -25 477 5 66.6 66 68 68 68 68 68 68 68 68 68 68 68 68								-		0
18-25" 8 1 1 16 -25 477 5 66.1 66.1 48-25" 9 1 32 -25 477 5 66 66 66 48-25" 110 1 48 -25 477 5 66 66 66 66 48-25" 111 1 64 -25 477 5 66 66 66 66 48-25" 111 1 64 -25 477 5 66 66 66 66 68 48-25" 111 1 64 -25 477 5 66 66 66 66 68 48-25" 112 1 0 -45 477 5 64.7 64.7 47.7 18-45" 13 1 16 44 5 477 5 64.7 64.7 64.7 18-45" 13 1 16 44 5 477 5 64.6 64.6 64.6 64.6 64.6 64.6 64.6 64						<del></del>				0
32-25° 9 1 1 32 -25 477 5 66 66 68 48-25° 110 1 48 -25 477 5 66 66 66 -66 -62 -25° 111 1 64 -25 477 5 66 66 66 -66 -62 -25° 111 1 1 64 -25 477 5 66 66 66 -66 -65 -65 -65 -65 -65 -65										0
48-25" 10 1 48 -25 477 5 66 66 66 4.7 64-25" 11 1 64 -25 477 5 66 66 66 66 66 66 66 66 66 66 66 66 6										0
64-25" 111 1 1 64 -25 477 5 66 66 66 -25 477 5 64.7 64.7 64.7 64.7 12 1 1 0 -45 477 5 64.7 64.7 64.7 32-45" 13 1 16 -45 477 5 64.7 64.7 32-45" 14 1 32 -45 477 5 64.6 64.6 64.6 64.6 64.5" 15 1 48 -45 477 5 64.6 64.6 64.6 64.5" 16 1 64 -45 477 5 64.6 64.6 64.6 64.5" 16 1 64 -45 477 5 64.6 64.6 64.6 64.5" 17 1 0 -65 477 5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63								-		0
Q-45"         12         1         0         -45         477         5         64.7         64.7           16-45"         13         1         16         -45         477         5         64.7         64.7           48-45"         15         1         48         -45         477         5         64.6         64.6           64-45"         16         1         64         -45         477         5         64.6         64.6           64-45"         16         1         64         -45         477         5         64.6         64.6           64-45"         16         1         64         -45         477         5         63.5         63.5           16-65"         18         1         16         -65         477         5         63.5         63.5           48-65"         20         1         48         -65         477         5         63.5         63.5           48-65"         21         1         64         -65         477         5         63.5         63.2           18-85"         23         1         16         -85         477         5         61.2								-		0
16-45" 13 1 1 16 -45 477 5 64.7 64.7 32-45" 14 1 32 -45 477 5 64.7 64.7 64.7 32-45" 14 1 32 -45 477 5 64.6 64.6 64.6 64.6 64.45" 16 1 64 -45 477 5 64.6 64.6 64.6 64.6 64.6 64.6 64.6 64					<del></del>					0
3246" 14 1 32 45 477 5 64.6 64.7 64.7 48-45" 15 1 48 45" 15 1 48 45 477 5 64.6 64.6 64.6 64.45" 16 1 64 45 477 5 64.6 64.6 64.6 664.5" 17 1 0 4.5 477 5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63								-		0
48-45" 15 1 48 45 477 5 64.6 64.6 64.6 64.5" 16 1 64 45 477 5 64.6 64.6 64.6 64.6 66.5" 17 1 0 6.5 477 5 63.5 63.5 63.5 18.655" 19 1 32 65 477 5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63										0
64-45" 16 1 64 -45 477 5 64.6 64.6 64.6 6-65" 17 1 0 -65 477 5 63.5 63.5 63.5 63.5 63.5 63.5 63.5 63								-		0
0-65"   17										0
16-65"         18         1         16         -65         477         5         63.5         63.5           32-65"         19         1         32         -65         477         5         63.5         63.5         63.5           48-65"         20         1         48         -65         477         5         63.5         63.5         63.5           64-65"         21         1         64         -65         477         5         60.6         60.6         60.6           0-85"         22         1         0         -85         477         5         60.6         60.6         60.6           16-85"         23         1         16         -85         477         5         61.6         61.6         61.6         63.5         32.2         60.6										0
32-65" 19 1 32 -65 477 5 63.5 63.5 63.5 64-65" 20 1 48 -65" 477 5 63.5 63.5 63.5 63.5 64-65" 20 1 48 -65 477 5 63.5 63.2 63.2 68-65" 21 1 64 -65 477 5 63.2 63.2 68-65" 22 1 0 0 -85 477 5 60.6 60.6 60.6 60.6 60.6 60.6 60.6 60		18		16						0
48-65"         20         1         48         -65         477         5         63.5         63.5         63.5           64-65"         21         1         64         -85         477         5         63.2         63.2         63.2         60.6										0
64-66" 21 1 64 -65 477 5 63.2 63.2 6.6 -6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.	48-65"	20								0
0-85" 22 1 0 -85 477 5 60.6 60.6 1.6 16-85" 23 1 16 -85 477 5 61.6 61.6 61.6 16.6 16.6 32-85" 24 1 32 -85 477 5 61.9 61.9 61.9 14-8-85" 25 1 48 -85 477 5 61.9 61.9 19 10 14-8-85" 26 1 64 -85 477 5 61.1 61.1 (0.10-10.5 477 5 5.8.7 58.7 16-10.5 12.8 1 16 -10.5 477 5 5.8.7 58.7 16-10.5 12.8 1 16 -10.5 477 5 5.9.8 59.5 59.5 (0.32-10.5" 29 1 32 -10.5 477 5 5.9.8 59.8 59.8 12.1 1 64 -10.5 477 5 5.9.8 59.8 59.8 (0.10-10.5" 31 1 48 -10.5 477 5 5.9.4 59.4 (0.12-5" 32 -10.5" 32 -10.5 477 5 5.9.4 59.4 (0.12-5" 32 -12.5" 32 -10.5 477 5 5.9.4 59.4 (0.12-5" 32 -12.5" 32 -12.5 477 5 5.8 57.3 57.3 (0.12-5" 32 -12.5" 34 1 32 -12.5 477 5 5.8 58.7 58.8 (0.12-5" 32 -12.5" 34 1 32 -12.5 477 5 5.8 58.1 58.1 (0.12-5" 33 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.12-5" 33 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.12-5" 33 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.14-5" 37 1 0.14-5" 477 5 5.8 58.1 58.1 (0.14-5" 38 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.14-5" 38 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.14-5" 38 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.14-5" 38 1 1 64 -12.5 477 5 5.8 58.1 58.1 (0.14-5" 38 1 1 64 -12.5 477 5 5.8 56.6 56.6 (0.14-5" 38 1 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-5" 38 1 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-5" 39 1 32 -14.5 477 5 5.8 56.6 56.6 (0.14-5" 39 1 32 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 38 1 1 6 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 38 1 1 6 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 64 -14.5 477 5 5.8 56.5 55.5 55.5 (0.14-14.5" 41 1 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 1 64 -14.5 477 5 5.8 56.5 55.5 55.5 (0.14-14.5" 41 1 1 64 -14.5 477 5 5.8 56.6 56.6 (0.14-14.5" 41 1 1	64-65"	21	1	64						0
16-85"         23         1         16         -85         477         5         61.6         61.6           32-85"         24         1         32         -85         477         5         61.9         61.9           64-85"         25         1         48         -85         477         5         61.7         61.7         61.7           64-85"         26         1         64         -85         477         5         61.1         61.1         61.1         61.7           0-105"         27         1         0         -105         477         5         58.7         58.7         58.7           16-105"         28         1         16         -105         477         5         59.8         59.8         59.8           32-105"         29         1         32         -105         477         5         59.8         59.8         59.8           48-105"         30         1         48         -105         477         5         59.7         59.7         59.7           64-105"         31         1         64         -105         477         5         57.8         57.3         57.3	0-85"	22	1	0				<u> </u>		0
32-85"   24	16-85"	23	1	16	-85	477				0
48-88"         25         1         48         -85         477         5         61.7         61.7           64-86"         26         1         64         -85         477         5         61.1         61.1         (61.1	32-85"	24	1	32	-85	477				0
64-85" 26 1 64 -85 477 5 61.1 61.1 0.105" 27 1 0 -105 477 5 58.7 58.7 61.1 16.105" 28 1 16 -105 477 5 59.5 59.5 59.5 32-105" 29 1 32 -105 477 5 59.8 59.8 59.8 48-105" 30 1 48 -105 477 5 59.4 59.4 60-125" 32 1 0 -125" 477 5 59.4 59.4 60-125" 32 1 0 -125 477 5 57.3 57.3 57.3 57.3 57.3 57.3 57.3	48-85"	25	1 .	48	-85	477				0
0-105" 27 1 0 -105 477 5 58.7 58.7 16-105" 28 1 16 -105 477 5 59.5 59.5 (0.105) 29 1 32 -105 477 5 59.8 59.8 (0.105) 32-105" 30 1 48 -105 477 5 59.7 59.7 (0.105) 31 1 64 -105 477 5 59.4 59.4 (0.125) 32 1 0 -125 477 5 57.3 57.3 (0.125) 32 1 0 -125 477 5 57.3 57.3 (0.125) 32 1 0 -125 477 5 57.8 57.8 57.8 (0.125) 33 1 16 -125 477 5 57.8 57.8 57.8 (0.125) 33 1 16 -125 477 5 58.1 58.1 (0.125) 33 1 1 16 -125 477 5 58.1 58.1 (0.125) 33 1 1 16 -125 477 5 58.1 58.1 (0.125) 33 1 1 48 -125 477 5 58.1 58.1 (0.125) 35 1 48 -125 477 5 58.1 58.1 (0.125) 35 1 48 -125 477 5 58.1 58.1 (0.145) 38 1 1 64 4-125 477 5 58.1 58.1 (0.145) 38 1 16 44 477 5 56.4 56.4 (0.145) 38 1 16 44 547 5 56.4 56.4 (0.145) 39 1 32 445 477 5 56.4 56.4 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 32 445 477 5 56.6 56.6 (0.125) 39 1 39 1 30 1 30 1 30 1 30 1 30 1 30 1	64-85"	26	1	64	-85	477				0
16-105" 28 1 16 -105 477 5 59.5 59.5 (32-105") 29 1 32 -105 477 5 59.8 59.8 (32-105") 30 1 48 -105 477 5 59.8 59.8 (32-105") 30 1 48 -105 477 5 59.7 59.7 (32-105") 31 1 64 -105 477 5 59.4 59.4 (32-105") 32 1 0 -125" 32 1 0 -125 477 5 57.8 57.8 57.8 (32-125") 34 1 32 -125 477 5 57.8 57.8 57.8 (32-125") 34 1 32 -125 477 5 58.1 58.1 (32-125") 34 1 32 -125 477 5 58.1 58.1 (32-125") 35 1 48 -125 477 5 58.1 58.1 (32-125") 36 1 64 -125 477 5 58.1 58.1 (32-125") 36 1 64 -125 477 5 56.6 56.0 (32-125") 36 1 64 -125 477 5 56.4 56.4 (32-145") 39 1 32 -145 477 5 56.4 56.4 (32-145") 39 1 32 -145 477 5 56.4 56.4 (32-145") 39 1 32 -145 477 5 56.6 56.6 (32-145") 39 1 32 -145 477 5 56.6 56.6 (32-145") 39 1 32 -145 477 5 56.6 56.6 (32-145") 39 1 32 -145 477 5 56.6 56.6 (32-145") 39 1 32 -145 477 5 56.4 56.4 (32-145") 41 1 64 -145 477 5 56.6 56.6 (32-145") 42 1 0 -165 477 5 56.4 56.4 (32-145") 42 1 0 -165 477 5 56.4 56.4 (32-145") 42 1 0 -165 477 5 56.4 56.4 (32-145") 43 1 16 -165 477 5 56.4 56.4 (32-145") 43 1 16 -165 477 5 56.5 55.5 55.5 (32-165") 44 1 32 -165 477 5 55.5 55.5 55.5 (32-165") 44 1 32 -165 477 5 55.5 55.5 55.5 (32-165") 44 1 32 -165 477 5 55.5 55.5 55.5 (32-165") 44 1 32 -165 477 5 55.5 55.5 55.5 (32-165") 45 1 48 -165 477 5 55.5 55.5 55.5 (32-165") 46 1 64 -165 477 5 55.5 55.5 55.5 (32-165") 47 1 0 -185 477 5 55.5 55.5 55.5 (32-165") 48 1 1 6 -185 477 5 55.5 55.5 55.5 (32-165") 48 1 1 6 -185 477 5 55.5 55.5 55.5 (32-165") 54 1 48 -165 477 5 55.5 55.5 55.5 (32-165") 54 1 48 -185 477 5 55.5 55.5 55.5 (32-165") 54 1 64 -185 477 5 55.5 55.5 55.5 (32-165") 54 1 64 -185 477 5 55.5 55.5 55.5 (32-165") 54 1 64 -185 477 5 55.5 55.5 55.5 (32-165") 55 55.5 55.5 (32-165") 55 55 55.5 55.5 (32-165") 55 55 55.5 55.5 (32-165") 55 55 55.5 55.5 (32-165") 55 55 55.5 55.5 (32-165") 55 55 55.5 55.5 (32-165") 55 55 55.5 (32-165") 55 55 55 55.5 (32-165") 55 55 55 55 55 55 55 55 55 55 55 55 55	0-105"	27	1	0	-105	477	5			0
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48-105"       30       1       48       -105       477       5       59.7       59.7       6         64-105"       31       1       64       -105       477       5       59.4       59.4       0         0-125"       32       1       0       -125       477       5       57.3       57.3       0         16-125"       33       1       16       -125       477       5       57.8       57.8       0         32-125"       34       1       32       -125       477       5       58.1       58.1       0         48-125"       35       1       48       -125       477       5       58       58       1         48-125"       36       1       64       -125       477       5       56       56       57.8       57.8       57.8       66         64-125"       37       1       0       -145       477       5       56       56       56       66       64         64-145"       37       1       0       -145       477       5       56.4       56.4       60         16-145"       38       1       16			1	32	-105	477	5	59.8		0
0-125"         32         1         0         -125         477         5         57.3         57.3         6.1           16-125"         33         1         16         -125         477         5         57.8         57.8         67.8           32-125"         34         1         32         -125         477         5         58.1         58.1         6           48-125"         35         1         48         -125         477         5         58.1         58.1         6           64-125"         36         1         64         -125         477         5         58.58         58.0         6           64-125"         36         1         64         -125         477         5         56.56         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.4         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6         56.6 </td <td></td> <td></td> <td></td> <td></td> <td>-105</td> <td>477</td> <td>5</td> <td>59.7</td> <td>59.7</td> <td>0</td>					-105	477	5	59.7	59.7	0
16-125"         33         1         16         -125         477         5         57.8         57.8         57.8         32-125"         34         1         32         -125         477         5         58.1         58.1         60         32-125"         34         1         32         -125         477         5         58.1         58.1         58.1         60         38.1         64-125"         477         5         58         58         60         64-125"         36         1         64         -125         477         5         58         58         60         64-125"         36         1         64         -125         477         5         56         56         56         56         56         56         56         56         56         56         56         56         56         56         56         56         46         40         32-145"         39         1         32         -145         477         5         56.6         56.6         56.6         66         64         48-145"         40         1         48         -145         477         5         56.6         56.6         66         66         64-145"         477							5	59.4	59.4	0
32-125" 34 1 32 -125 477 5 58.1 58.1 (48-125" 35 1 48 -125 477 5 58.1 58.1 (64-125" 36 1 64 -125 477 5 56 56 56 (64-125" 37 1 0 -145 477 5 56 56 56 (64-125" 38 1 16 -145 477 5 56.4 56.4 (77 56.4 56.4 (77 56.4							5	57.3	57.3	0
48-125"         35         1         48         -125         477         5         58         58         6           64-125"         36         1         64         -125         477         5         57.8         57.8         0           0-145"         37         1         0         -145         477         5         56         56         6           16-145"         38         1         16         -145         477         5         56.4         56.4         56.4           32-145"         39         1         32         -145         477         5         56.6         56.6         56.6           48-145"         40         1         48         -145         477         5         56.6         56.6         66.6           64-145"         41         1         64         -145         477         5         56.6         56.6         66.6           64-145"         41         1         64         -145         477         5         56.4         56.4         0           9-16-165"         42         1         0         -165         477         5         55.2         55.2         0								57.8	57.8	0
64-125" 36 1 64 -125 477 5 57.8 57.8 6.6 6.1 C								58.1	58.1	0
0-145"         37         1         0         -145         477         5         56         56         0           16-145"         38         1         16         -145         477         5         56.4         56.4         0           32-145"         39         1         32         -145         477         5         56.6         56.6         0           48-145"         40         1         48         -145         477         5         56.6         56.6         0           64-145"         41         1         64         -145         477         5         56.6         56.6         0           64-165"         42         1         0         -165         477         5         55.4         56.4         0           16-165"         43         1         16         -165         477         5         55.2         55.2         55.2         0           32-165"         44         1         32         -165         477         5         55.5         55.5         0           48-165"         45         1         48         -165         477         5         55.5         55.5								58	58	0
16-145"       38       1       16       -145       477       5       56.4       56.4       32         32-145"       39       1       32       -145       477       5       56.6       56.6       6         48-145"       40       1       48       -145       477       5       56.6       56.6       6         64-145"       41       1       64       -145       477       5       56.6       56.6       6         64-145"       41       1       64       -145       477       5       56.6       56.6       6         64-165"       42       1       0       -165       477       5       54.9       54.9       6         32-165"       44       1       32       -165       477       5       55.2       55.2       55.2         32-165"       44       1       32       -165       477       5       55.5       55.5       55.5       65.5       6         48-165"       45       1       48       -165       477       5       55.5       55.5       55.5       6       6       64-165"       477       5       55.5       55.								57.8	57.8	0
32-145"         39         1         32         -145         477         5         56.6         56.6         6           48-145"         40         1         48         -145         477         5         56.6         56.6         6           64-145"         41         1         64         -145         477         5         56.4         56.4         0           0-165"         42         1         0         -165         477         5         54.9         54.9         0           16-165"         43         1         16         -165         477         5         55.2         55.2         0           32-165"         44         1         32         -165         477         5         55.4         55.4         0           48-165"         45         1         48         -165         477         5         55.5         55.5         0           64-165"         46         1         64         -165         477         5         55.5         55.5         0           0-185"         47         1         0         -185         477         5         54.3         54.3         0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>										0
48-145"         40         1         48         -145         477         5         56.6         56.6         6           64-145"         41         1         64         -145         477         5         56.4         56.4         0           0-165"         42         1         0         -165         477         5         54.9         54.9         0           16-165"         43         1         16         -165         477         5         55.2         55.2         55.2         0           32-165"         44         1         32         -165         477         5         55.4         55.4         0           48-165"         45         1         48         -165         477         5         55.5         55.5         55.5         0         0         -185         477         5         55.5         55.5         55.5         0         0         -185         477         5         55.5         55.5         55.5         0         0         -185         477         5         54.3         54.3         0         0         -185         477         5         54.3         54.3         0         0	16-145"								56.4	0
64-145"         41         1         64         -145         477         5         56.4         56.4         0           0-165"         42         1         0         -165         477         5         54.9         54.9         0           16-165"         43         1         16         -165         477         5         55.2         55.2         0           32-165"         44         1         32         -165         477         5         55.4         55.4         0           48-165"         45         1         48         -165         477         5         55.5         55.5         0           64-165"         46         1         64         -165         477         5         55.5         55.5         0         0         -185         477         5         55.5         55.5         0         0         -185         477         5         55.5         55.5         0         0         -185         477         5         55.5         55.5         0         0         -185         477         5         54.5         54.0         0         0         -185         477         5         54.6         <										0
0-165"         42         1         0         -165         477         5         54.9         54.9         0         0         16-165"         477         5         54.9         54.9         0         0         0         0         16-165"         477         5         55.2         55.2         0         0         0         0         0         1<										0
16-165"       43       1       16       -165       477       5       55.2       55.2       02.3         32-165"       44       1       32       -165       477       5       55.4       55.4       02.4         48-165"       45       1       48       -165       477       5       55.5       55.5       0										0
32-165"         44         1         32         -165         477         5         55.4         55.4         64.205"         64.165"         45         1         48         -165         477         5         55.5         55.5         0.0         64.165"         46         1         64         -165         477         5         55.5         55.5         0.0         0.0         0.0         1.0         -185         477         5         55.5         55.5         55.5         0.0         0.0         0.0         1.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td></t<>										0
48-165"         45         1         48         -165         477         5         55.5         55.5         0           64-165"         46         1         64         -165         477         5         55.5         55.5         0           0-185"         47         1         0         -185         477         5         54         54         0           16-185"         48         1         16         -185         477         5         54.3         54.3         54.3         0           32-185"         49         1         32         -185         477         5         54.6         54.6         0         0           48-185"         50         1         48         -185         477         5         54.8         54.8         0         0           64-185"         51         1         64         -185         477         5         55.5         55         0		_								0
64-165"       46       1       64       -165       477       5       55.5       55.5       00.										0
0-185"         47         1         0         -185         477         5         54         54         0           16-185"         48         1         16         -185         477         5         54.3         54.3         0           32-185"         49         1         32         -185         477         5         54.6         54.6         0           48-185"         50         1         48         -185         477         5         54.8         54.8         0           64-185"         51         1         64         -185         477         5         55         55         55         0           0-205"         52         1         0         -205         477         5         53.4         53.4         0         0           16-205"         53         1         16         -205         477         5         53.7         53.7         0         3         32-205"         54         54         0         0         48-205"         54         54         0         0         64-205"         55         54.3         54.3         0         0         64-205"         56         1         64<										0
16-185"       48       1       16       -185       477       5       54.3       54.3       0         32-185"       49       1       32       -185       477       5       54.6       54.6       0         48-185"       50       1       48       -185       477       5       54.8       54.8       0         64-185"       51       1       64       -185       477       5       55       55       0         0-205"       52       1       0       -205       477       5       53.4       53.4       0         16-205"       53       1       16       -205       477       5       53.7       53.7       0         32-205"       54       1       32       -205       477       5       54       54       0         48-205"       55       1       48       -205       477       5       54.3       54.3       0         64-205"       56       1       64       -205       477       5       54.5       54.5       0         0-225"       57       1       0       -225       477       5       52.9       52.										
32-185"         49         1         32         -185         477         5         54.6         54.6         0           48-185"         50         1         48         -185         477         5         54.8         54.8         0           64-185"         51         1         64         -185         477         5         55         55         0           0-205"         52         1         0         -205         477         5         53.4         53.4         0           16-205"         53         1         16         -205         477         5         53.7         53.7         0           32-205"         54         1         32         -205         477         5         54         54         0           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         52.9  <										0
48-185"         50         1         48         -185         477         5         54.8         54.8         0           64-185"         51         1         64         -185         477         5         55         55         0           0-205"         52         1         0         -205         477         5         53.4         53.4         0           16-205"         53         1         16         -205         477         5         53.7         53.7         0           32-205"         54         1         32         -205         477         5         54         54         0           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         52.9										
64-185"         51         1         64         -185         477         5         55         55         0           0-205"         52         1         0         -205         477         5         53.4         53.4         0           16-205"         53         1         16         -205         477         5         53.7         53.7         0           32-205"         54         1         32         -205         477         5         54         54         0           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         0										
0-205"         52         1         0         -205         477         5         53.4         53.4         0           16-205"         53         1         16         -205         477         5         53.7         53.7         0           32-205"         54         1         32         -205         477         5         54         54         0           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         0										
16-205"         53         1         16         -205         477         5         53.7         53.7         0           32-205"         54         1         32         -205         477         5         54         54         0           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         0										
32-205"         54         1         32         -205         477         5         54         54         54           48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         0										
48-205"         55         1         48         -205         477         5         54.3         54.3         0           64-205"         56         1         64         -205         477         5         54.5         54.5         0           0-225"         57         1         0         -225         477         5         52.9         52.9         0		_								
64-205" 56 1 64 -205 477 5 54.5 54.5 0 0-225" 57 1 0 -225 477 5 52.9 52.9 0										
0-225" 57 1 0 -225 477 5 52.9 52.9 0										
02.0										
16-225"   58   1   16   -225   477   5     53.3   53.3   0	16-225"	58	1	16	-225	477	5		53.3	0

32-225"	59	1	32	-225	477	5	53.6	53.6	0
48-225"	60	1	48	-225	477	5	53.8	53.8	
64-225"	61	1	64	-225	477	5	54.1	54.1	0
0-245"	62	1	0	-245	477	5	52.5	52.5	0
16-245"	63	1	16	-245	477	5	52.8	52.8	0
32-245"	64	1	32	-245	477	5	53.2	53.2	0
48-245"	65	1	48	-245	477	5	53.5	53.5	- 6
64-245"	66	1	64	-245	477	5	53.7	53.7	0
0-265"	67	1	0	-265	477	5	52.1	52.1	0
16-265"	68	1	16	-265	477	5	52.6	52.6	0
32-265"	69	1	32	-265	477	5	52.9	52.9	
48-265"	70	1	48	-265	477	5	53.2	53.2	
64-265"	- 71	1	64	-265	477	5	53.4	53.4	- 6

### **EILAR ASSOCIATES:** Noise Impact on Building Facades



Prepared by

Mark Sturino

Project Number

A61114N1

Casa de Verde Apartments

Client Name Attention J.R.E. Partners, LLC Joyce A. Peterson

Project Name Run Title

Vehicular Noise Impact on Outdoor Use Areas

Roadways							Points				
•				Coordin	ates (pav	rement)		Flow Cont	rol	Segm	ent
Name	Width	Name	No.	x	у	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	
	ft			ft	ft	ft	1	mph	%		
Greenfield Dr EB	33	point2	2	-500.0	21.5	466.00				Average	
		point18	18	-303.1	21.5	470.00				Average	
		point33	33	-285.1		470.00					
Greenfield Dr WB"	33	point32	32	-285.1		470.00		0	100	Average	
		point17	17	-303.1		470.00				Average	
		point3	3	-500.0		466.00					
1st St NB"	18	point24	24	-285.1	-618.0	469.00				Average	
		point25	25	-285.1		470.00				Average	
		point26	26	-285.1	54.5	470.00				Average	
		point5	5	-285.1	500.0	479.00					
1st St SB"	18	point8	8	-303.1		479.00				Average	
		point13	13	-303.1		470.00				Average	
		point14	14	-303.1	21.5	470.00				Average	
		point15	15	-303.1	-618.0	469.00					*
Greenfield Dr EB 2"	12	point29	29	-285.1		470.00		0	100	Average	
		point28	28	500.0	21.5	490.00					
Greenfield Dr WB 2"		point31	31	500.0	54.5	490.00				Average	
		point30	30	-285.1	54.5	470.00					

Roadways						Poi	nts					<del></del>
							Segr	nent				
Name	Name	No.	Autos		Mtru	Mtrucks		Htrucks		Buses		cycles
		'''	Volume	Speed	Volume	Speed			Volume	Speed	Volume	
			veh/hr	mph				Spood	voidine	Opecu	Volume	Speed
Greenfield Dr EB	point2	2	294	45	10	45	6	45	0	0	0	0
	point18	18	294	45	10			45		0	0	0
	point33	33						73		- 0	U	U
Greenfield Dr WB"	point32	32	294	45	9	45	6	45	0	0	0	
	point17	17	294	45	9	45	6	45	0	0	0	0
	point3	3						45		U	0	0
1st St NB"	point24	24	284	45	4	45	2	45	0	0		
	point25	25	284	45	4	45	2	45	0		0	0
	point26	26	284	45	4	45	2	45	0	0	0	0
	point5	5									0	0
1st St SB"	point8	8	284	45	5	45	1	45	0			
	point13	13	284	45	5	45		45	0	0	0	0
	point14	14	284	45	5	45		45		0	0	0
	point15	15				73		40	이	이	0	0
Greenfield Dr EB 2	point29	29	294	45	10	45	6	45				
•	point28	28					- 0	40	0	0	<u> </u>	0
Greenfield Dr WB 2	point31	31	294	45	9	45	6	45				
21	point30	30				+3	- 9	45	0	0	0	0

Name	Barriers								Points		~			
Name			If be	erm		Т		Coordinate		ı ———		Sec	mont	
Mest Neighbor   W   West Neighbor   W   W   W   W   West Neighbor   W   W   West Neighbor   W   W   West Neighbor   W   W   West Neighbor   W   W   W   West Neighbor   W   W   West Neighbor   W   W   West Neighbor   W   W   W   West Neighbor   W   W   W   W   W   W   W   West Neighbor   W   W   W   W   W   W   W   W   W					Ĭ	1		1	Ī	Laiaba	Sean	nent h	eiaht	
West Neighbor   W	Name	Туре			Name	No.	l x	V	,		pe	rtubati	on	
Mest Neighbor   W	İ		wiath	rise				,	-	at point	incre-		}	
West Neighbor   W			ft	ft·ft			f#	4	4	-		<b>∦</b> Up	# Dn	Gudeti
	West Neighbor	W	-``	10.10	point7	7						-	<u> </u>	
point5   5   66   6224   472   30   0   0   0   0   0   0   0   0					-									
					point5	5								
point3									472					
Peint   1											0	0		
Far West"											0	0	0	
	Far West"	W												
Par East"   W   Doint17   17   2-00   20   472   30   0   0   0   0   0   0   0   0														
Far East"   W					point8						- 0		- 4	
	Far East"	W			point17	17	-200				0	0	0	
								-20						
Doint13   13   200   20   472   30   0   0   0		+									0	0		
Garage"   W		-									0	0	0	
	Garage"	<del>lw l</del>												
		<del>                                     </del>												
						21								
									479					
1st and Greenfield"   W											0	0	0	
Doint29   29   -103   235   475   20   0   0   0   0   0   0   0   0	1st and Greenfield"	- l <sub>vv</sub> - l												
	Tot and Greenheid	1		_										
East Neighbor"														
East Neighbor"   W   point36   36   82   -50   479   20   0   0   0   0   0   0   0   0					point31	31					4			
point34   34   184   -102   479   20   0   0   0   0   0   0   0   0	East Neighbor"	W									0	0	0	
Doint33   33   184   -50   479   20   0   0   0   0		-										0		
Site Plan"   W		+-+										0	0	
Site Plan"         W         point52         52         27         -139         482         30         0         0         0           point51         51         27         -150.5         482         30         0         0         0           point50         50         30         -150.5         482         30         0         0         0           point49         49         30         -179.5         482         30         0         0         0           point44         47         27         -202.5         482         30         0         0         0           point47         47         27         -202.5         482         30         0         0         0         0           point45         45         30         -202.5         482         30         0 <td></td> <td>이</td> <td>이</td> <td>0</td> <td></td>											이	이	0	
	Site Plan"	w												
		++	<del></del>											
				_										
point47   47   27   -202.5   482   30   0   0   0   0   0   0   0   0		$\bot$				48		-179.5						
		+						-202.5						
point43		+									0	0	0	
point42   42   27   -245   482   30   0   0   0		+												
Doint41		+	$\dashv$											
Doint40   40   6   -286   482   30   0   0   0		+	-+											
Doint39   39   55   -286   482   30   0   0   0														
point38   38   55   -139   482   30   0   0   0						39								
Storage/Office" W point57 57 6 -140.5 482 30 0 0 0 0 0 point56 56 14.5 -140.5 482 30 0 0 0 0 0 point55 55 14.5 -162 482 30 0 0 0 0 0 point54 54 6 -162 482 30 0 0 0 0 0 point53 53 6 -140.5 482 30 0 0 0 0 0 point53 53 6 -140.5 482 30 0 0 0 0 0 point54 54 6 0 0 0 0 0 0 point54 54 6 0 0 0 0 0 0 point59 59 65 -298 482 6 0 0 0 0 0 0 point59 59 65 -298 482 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1					55							
Point56   56   14.5   -140.5   482   30   0   0   0   0   0   0   0   0	Storage/Office"	<del>                                      </del>							482					
point55   55   14.5   -162   482   30   0   0   0   0   0   0   0   0	Otorage/Onice	VV												
point54		+	-											
		+ +												
Wood Fence"         W         point61         61         0         -10         482         6         0         0         0           point60         60         0         -298         482         6         0         0         0           point59         59         65         -298         482         6         0         0         0		<del>                                     </del>									- 0	- 0	0	
point60 60 0 -298 482 6 0 0 0   point59 59 65 -298 482 6 0 0 0	Wood Fence"	W										<del> </del>		
point59 59 65 -298 482 6 0 0 0														
		+	$\Box$		oint59	59	65							
					oint58	58	65	-10						

Buildi	ng Rows	Points						
Name	Average			Coordinates (ground)				
7141110	Height	Percentage	No.	х	y	Z		
	ft	%		ft	ft	ft		
Building2	25	80	1	-237.3	-344.6	469.0		
			2	490.6	-344.6	480.0		
L			3	490.6	-584.6	480.0		
			4	-232.0	-584.6	469.0		
			5	-234.6	-352.6	469.0		

ſ	Receivers										
			Coordi	nates (pave	ment)		Calculated Laeq 1hr				
Name	No.	No. of Dwelling Units	x	у	z	Height above ground	With Barrier	Without Barrier	Noise Reduction		
			ft	ft	ft	ft	dBA	dBA	dBA		
R-1"	57	1	28.00	-165.00	482.00	15.00	48.7	48.7	0.0		
R-2"	58	1	9.00	-202.50	482.00	5.00	47.2	47.2	0.0		
R-3"	59	1	28.00	-217.50	482.00	15.00	43.8	43.8	0.0		
R-4"	60	1	18.00	-296.00	482.00	5.00	40.1	40.1	0.0		
R-5"	61	1	46.00	-296.00	482.00	5.00	43.4	43.4	0.0		
R-6"	62	1	59.00	-238.00	482.00	5.00	46.3	46.3	0.0		
R-7"	66	1	59.00	-191.00	482.00	5.00	47.8	47.8	0.0		
R-8"	67	1	59.00	-144.00	482.00	5.00	53.9	53.9	0.0		

		Recei		inates (pave				Sound Leve	Is
A.L.		No. of		mates (pave	ment)		Cal	culated Lae	g 1hr
Name	No.	Dwelling Units	x	у	z	Height above ground	With Barrier	Without Barrier	Noise Reductio
3-1"	57		ft	ft	ft	ft	dBA		
3-2"		1	41.00	-127.00	482.00			dBA	dBA
-3"	58	1	23.00	-205.00	482.00	3.00	55.1	55.1	0.
-4"	59	1	3.00	-256.50	482.00	3.00	47.6	47.6	0.
-5"	60	1	30.00	-281.00		0.00	43.7	43.7	0.
-5"	61	1	59.00	-247.00	482.00	0.00	39.5	39.5	0.
	62	1	59.00		482.00		46.0	46.0	0.
-7"	66	1	41.00	-160.00	482.00		49.6	49.6	0.
-8"	67	1		-127.00	482.00	15.00	56.2	56.2	
-9"	68		23.00	-205.00	482.00	15.00	47.0	47.0	0.
-10"	69		3	-256.5	482	15	44.2		0.0
11"	70		30	-281	482	15	45.5	44.2	0.0
12"	71		59	-247	482	15		45.5	0.0
13"		1	59	-160	482	15	50	50	0.0
	72	1	10.5	-137.8	482	15	50.5 55.2	50.5	0.0

### **APPENDIX C**

County of San Diego Roadway Classification Changes, Related Traffic Information and Noise Element Excerpts

### Part VIII Noise Element San Diego County General Plan

Adopted By Board of Supervisors February 20, 1975 Amended September 27, 2006 GPA 06-008

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### Policy 4b

Because exterior community noise equivalent levels (CNEL) above 60 decibels and/or interior CNEL above 45 decibels may have an adverse effect on public health and welfare, it is the policy of the County of San Diego that:

- 1. Whenever it appears that new *development* may result in any (existing or future) noise sensitive land use being subject to noise levels of CNEL equal to 60 decibels (A) or greater, an acoustical analysis shall be required.
- 2. If the acoustical analysis shows that noise levels at any noise sensitive land use will exceed CNEL equal to 60 decibels, modifications shall be made to the development which reduce the exterior noise level to less than CNEL of 60 decibels (A) and the interior noise level to less than CNEL of 45 decibels (A).
- 3. If modifications are not made to the *development* in accordance with paragraph 2 above, the *development* shall not be approved unless a finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without such modification; provided, however, if the acoustical study shows that sound levels for any noise sensitive land use will exceed a CNEL equal to 75 *decibels* (A) even with such modifications, the *development* shall not be approved irrespective of such social or economic considerations.

### **Definitions, Notes & Exceptions**

"Decibels (A)" refers to A-weighted sound levels as noted on page VIII-2 of this Element.

"Development" means any physical development including but not limited to residences, commercial, or industrial facilities, roads, civic buildings, hospitals, schools, airports, or similar facilities.

### "Exterior noise":

- (a) For single family detached dwelling projects, "exterior noise" means noise measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum area:
  - (i) Net lot area up to 4,000 sq. ft.:

400 square feet

(ii) Net lot area 4,000 sq. ft. to 10 ac.:

10% of net lot area

(iii) Net lot area over 10 ac.:

1 ac.

(b) For all other projects, "exterior noise" means noise measured at all exterior areas which are provided for *group or private usable open space* purposes.

(c) For County road construction projects, the exterior noise level due to vehicular traffic impacting a noise sensitive area should not exceed the following values:

(i) Federally funded projects:

The Noise standard contained in applicable Federal Highway Administration Standards.

(ii) Other projects:

60 decibels (A), except if the existing or projected noise level without the project is 58 decibels (A) or greater, a 3 decibel (A) increase is allowed, up to the maximum permitted by Federal Highway Administration Standards.

"Group or Private Usable Open Space" shall mean: Usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways (Group Usable Open Space); and usable open space intended for use of occupants of one dwelling unit, normally including yards, decks and balconies (Private Usable Open Space).

"Interior noise": The following exception shall apply: For rooms which are usually occupied only a part of the day (schools, libraries, or similar), the interior one-hour average sound level, due to noise outside, should not exceed 50 decibels (A).

"Noise sensitive land use" means any residence, hospital, school, hotel, resort, library or any other facility where quiet is an important attribute of the environment.

**Action Program 4b1** Recommend programs to soundproof buildings or redevelop areas where it is impossible to reduce existing source noise to acceptable levels.

**Action Program 4b2** Study the feasibility of extending the application of Section 1092, California Administrative Code dealing with noise insulation standards to single-family dwellings, and incorporating higher standards for reduction of exterior noise intrusion into structures.

**Action Program 4b3**. Require present and projected noise level data to be included in Environmental Impact Reports. Designs to mitigate adverse noise impacts shall also be used.

### **BOARD OF SUPERVISORS**



### COUNTY OF SAN DIEGO

### LAND USE AGENDA ITEM

GREG COX First District

DIANNE JACOB

PAM SLATER-PRICE Third District

RON ROBERTS

Fourth District BILL HORN

DATE:

August 2, 2006

TO:

**Board of Supervisors** 

SUBJECT:

GENERAL PLAN 2020: PROPOSED CHANGES TO CIRCULATION

ELEMENT ROAD NETWORK AND FRAMEWORK (District: All)

### **SUMMARY:**

### Overview

General Plan 2020 is a comprehensive update of the San Diego County General Plan, establishing future growth and development patterns for the unincorporated areas of the County. The purpose of this hearing is to review proposed General Plan revisions for Circulation Element roads and proposed modifications to the June 2005 Draft Land Use Map.

Acceptance of the revisions to the existing Circulation Element road network will complete regional mapping efforts for General Plan 2020 and will allow work to proceed on the remaining phases of the project, including the regional elements (Land Use, Housing, Circulation, Conservation, Parks and Open Space, Safety, and Noise), Community/Subregional plans, and the Draft Environmental Impact Report. All products submitted for review during this hearing are subject to further refinements and to future review by the Board of Supervisors as part of a complete package of General Plan 2020 products.

### Recommendation(s)

### **PLANNING COMMISSION**

The Planning Commission will report their recommendations directly to the Board of Supervisors, as their hearing is scheduled to occur after the docket date for this report.

### CHIEF ADMINISTRATIVE OFFICER

- 1. Accept the proposed August 2006 Circulation Element map.
- 2. Accept proposed August 2006 revisions to the Circulation Element framework, which will be incorporated into the Public Road Standards.
- 3. Accept proposed Mapping Criteria as the basis for road network planning decisions.
- 4. Accept the proposed August 2006 Draft Land Use Map, which contains land use

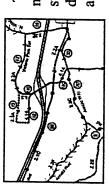
# COMMUNITY SUMMARIES, MAPS AND MATRICES

This section provides a community-level summary of road network planning for the Proposed CE Road Network. It includes a summary of planning issues for each community, along with maps depicting both existing and proposed CE networks (see below). Where appropriate, maps are also provided for the Board Alternative Network and /or modifications proposed for the August 2006 Draft Land Use Map. A table or matrix is provided that contains detailed information on each CE road, community preferences, and a basis for staff recommendations.

This section provides a community-level summary of road network planning for the GP2020 Circulation Element (CE). It is organized as follows:

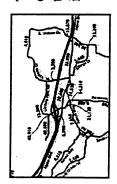
- North County Communities
- East County Communities
- Backcountry Communities

## Figure 1: Proposed Road Network



numbers in circles refer to the matrix. When they are yellow, the community planning group agreed with staff's recommendation. When they have a bold border, the community planning group had a minor disagreement over a specific classification. A black circle is a major disagreement on number of lanes, The line type and number/letter combination represent all proposed CE road classifications. and a white square indicates no community planning group action taken.

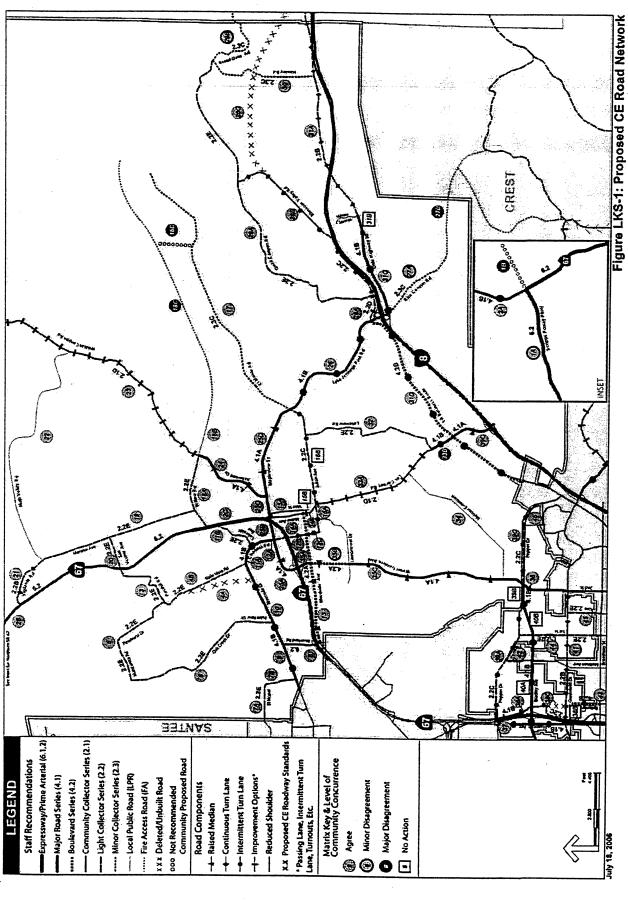
Figure 2: Roadway Segment Level of Service and Average Daily Traffic Volumes



Traffic model forecasts for the year 2030 are shown on this Map. Traffic Forecasts are based on build-out of the August 2006 Draft Land Use Map Proposed CE Road Network. LOS (A through F) is shown by the line color. The number above the lines is the forecast number of Average Daily Trips (ADTs) identified in thousands of vehicle trips.

AOB Brain Segretaria S	Bradley Avenue (SA 890)  Segment: First Street to Pepper Drive  Existing Condition: Unbuilt CE Road  Current Classification: Major Road (4+ lanes)  Greenfield Drive (SC 1860)  Segment: El Cajon boundary to Second Street  Existing Condition: 2 lanes	Minor Downgrade 4.1B Major Road with Intermittent Turn Lanes (4+ lanes)  CPG Preference: No Action (CPG has not reviewed latest staff recommendation)  Downgrade Classification  2.2B Light Collector with Continuous Turn Lane (2+ lanes)	<ul> <li>Road Capacity – A 4-lane road is needed to meet projected traffic volumes. The CPG agreed with staff's original recommendation of 4.2B but based on additional testing, staff has changed its recommendation to 4.1B to accommodate additional traffic and relieve pressure on Pepper Drive. The CPG has not had a chance to review the change.</li> <li>Road Capacity – A 2-lane road is sufficient to meet projected traffic volumes except for a small portion of the road.</li> <li>Minimize Costs – The construction of a 4-lane road to improve such a small segment would not be cost effective. Alternate</li> </ul>
		4.1B Major Road with Intermittent Turn Lanes (4+ lanes)  CPG Preference: No Action (CPG has not reviewed latest staff recommendation)  Downgrade Classification  2.2B Light Collector with Continuous Turn Lane (2+ lanes)	meet projected traffic volumes. The CPG agreed with staff's original recommendation of 4.2B but based on additional testing, staff has changed its recommendation to 4.1B to accommodate additional traffic and relieve pressure on Pepper Drive. The CPG has not had a chance to review the change.  • Road Capacity – A 2-lane road is sufficient to meet projected traffic volumes except for a small portion of the road.  • Minimize Costs – The construction of a 4-lane road to improve such a small segment would not be cost effective. Alternate
		CPG Preference:  No Action (CPG has not reviewed latest staff recommendation)  Downgrade Classification  2.2B Light Collector with Continuous Turn Lane (2+ lanes)	additional testing, staff has changed its recommendation to 4.1B to accommodate additional traffic and relieve pressure on Pepper Drive. The CPG has not had a chance to review the change.  • Road Capacity – A 2-lane road is sufficient to meet projected traffic volumes except for a small portion of the road.  • Minimize Costs – The construction of a 4-lane road to improve such a small segment would not be cost effective. Alternate
	eenfield Drive (SC 1860)  gment: El Cajon boundary to Second Street isting Condition: 2 lanes	Downgrade Classification 2.2B Light Collector with Continuous Turn Lane (2+ lanes)	<ul> <li>Road Capacity – A 2-lane road is sufficient to meet projected traffic volumes except for a small portion of the road.</li> <li>Minimize Costs – The construction of a 4-lane road to improve such a small segment would not be cost effective. Alternate</li> </ul>
Segn Exis Cun	gment: El Cajon boundary to Second Street string Condition: 2 lanes	2.2B Light Collector with Continuous Turn Lane (2+ lanes)	<ul> <li>a small portion of the road.</li> <li>Minimize Costs – The construction of a 4-lane road to improve such a small segment would not be cost effective. Alternate</li> </ul>
Cun			• Minimize Costs – The construction of a 4- lane road to improve such a small segment would not be cost effective. Alternate
	Current Classification: Collector Road (4 lanes)		
			routes are also available to alleviate the congestion.
			Note: Small segment at State Route 67 has failing level of service
42 Ball	Ballantyne Street (SC 1880)	Minor Downgrade	• Road Capacity - A 4-lane road is needed to
Segr Exis	Segment: Greenfield Drive to Broadway  Existing Condition: 2 lanes	4.2B Boulevard with Intermittent Turn Lanes (4+ lanes)	meet projected traffic volumes.
<u>Curr</u> (4 la	Current Classification: Collector Road (4 lanes)		
43 Nor	North Mollison Avenue (SC 1871)	Downgrade Classification	• Road Capacity - A 2-lane road is sufficient
Segr	Segment: Bradley Avenue to Pepper Drive Existing Condition: 2 lanes	2.2E Light Collector (2 lanes)	to meet projected traffic volumes.
Curr (4 la	Current Classification: Collector Road (4 lanes)		

East County Communities



Lakeside/Pepper Drive-Bostonia

East County Communities

### Pertinent Sections from the County of San Diego Noise Ordinance

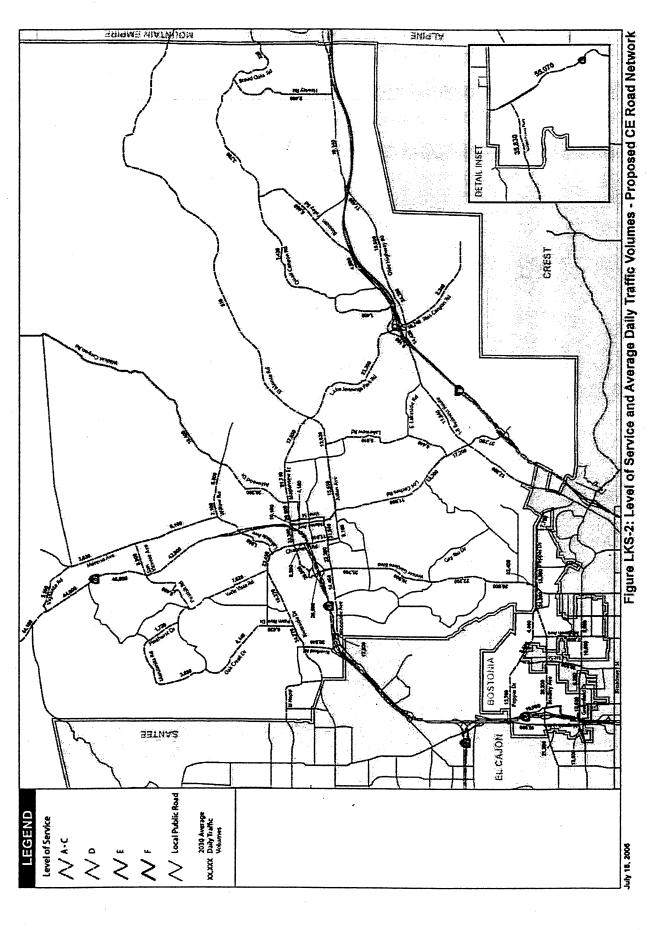
In general, the Noise Ordinance is more restrictive than the Noise Element to the General Plan, since it specifies hourly noise limits, whereas the Noise Element specifies weighted noise limits averaged over a 24-hour period. Furthermore, many municipalities apply their noise element provisions primarily for planning and permitting purposes, while using noise ordinances primarily for enforcement and noise control of nuisance noise.

According to Chapter 4 of the County Noise Ordinance, the following noise levels are limits that depend on land use zones.

SEC. 36.404. SOUND LEVEL LIMITS.

Unless a variance has been applied for and granted pursuant to this chapter, it shall be unlawful for any person to cause or allow the creation of any noise to the extent that the one-hour average sound level, at any point on or beyond the boundaries of the property on which the sound is produced, exceeds the applicable limits set forth below except that construction noise level limits shall be governed by Section 36.410 of this chapter.

	[Sound Level Limits]	
ZONE		APPLICABLE LIMIT ONE-HOUR AVERAGE SOUND LEVEL (DECIBELS)
R-S, R-D, R-R, A-70, A-72 S-80, S-87, S-88, S-90, R-V, and R-U Use Regulations with a density of less than 11 dwelling units or less per acre.	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	50 45
R-RO, R-C, R-M, C-30, S-84, S-86, R-V AND R-U Use Regulations with a density of 11 or more dwelling units per acre.	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	55 50
S-94 and all other commercial zones.	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	60 55
M-50, M-52, M-54	Anytime	70
S-82, M-58, A-72 and all other industrial zones.	Anytime	75



Lakeside/Pepper Drive-Bostonia

East County Communities.

If the measured ambient level exceeds the applicable limit noted above, the allowable one hour average sound level shall be the ambient noise level. The ambient noise level shall be measured when the alleged noise violation source is not operating.

The sound level limit at a location on a boundary between two (2) zoning districts is the arithmetic mean of the respective limits for the two districts; provided however, that the one-hour average sound level limit applicable to extractive industries, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone where the extractive industry is actually located.

Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the noise level limits of this section, measured at or beyond six (6) feet from the boundary of the easement upon which the equipment is located.... (Amended by Ord. No. 7094 (N.S.), effective 3-27-86)

SEC. 36.410. CONSTRUCTION EQUIPMENT.

Except for emergency work, it shall be unlawful for any person, including the County of San Diego, to operate construction equipment at any construction site, except as outlined in subsections (a) and (b) below:

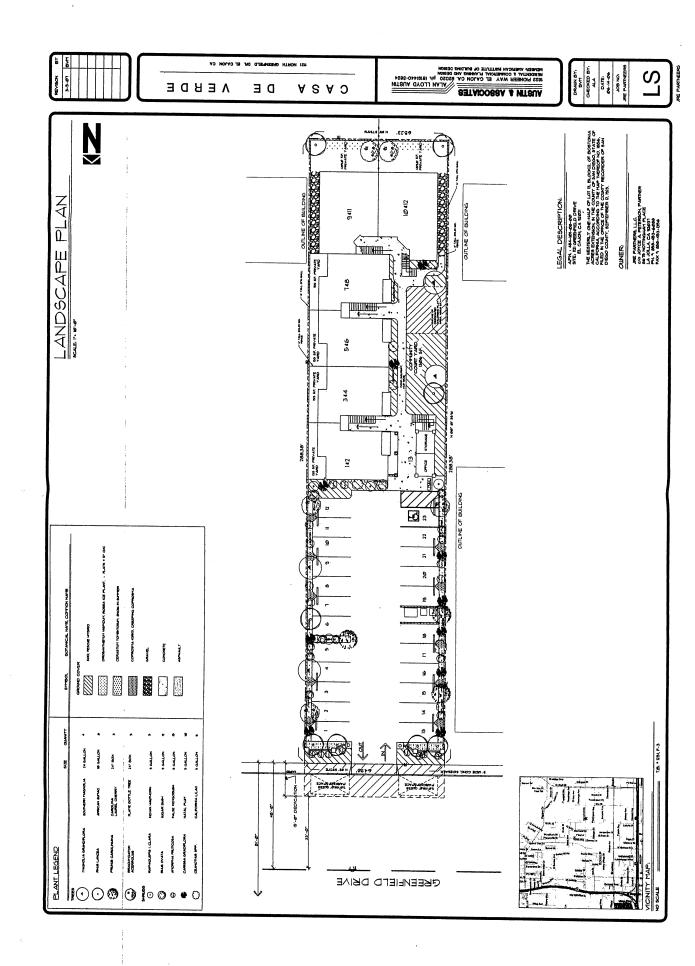
- (a) It shall be unlawful for any person, including the County of San Diego, to operate construction equipment at any construction site on Sundays, and days appointed by the President, Governor, or the Board of Supervisors for a public fast, Thanksgiving, or holiday. Notwithstanding the above, a person may operate construction equipment on the above-specified days between the hours of 10 a.m. and 5 p.m. in compliance with the requirements of subdivision (b) of this Section at his residence or for the purpose of constructing a residence for himself, provided such operation of construction equipment is not carried on for profit of livelihood. In addition, it shall be unlawful for any person to operate construction equipment at any construction site on Mondays through Saturdays except between the hours of 7 a.m. and 7 p.m.
- (b) No such equipment, or combination of equipment regardless of age or date of acquisition, shall be operated so as to cause noise at a level in excess of seventy-five (75) decibels for more that 8 hours during any twenty-four (24) hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

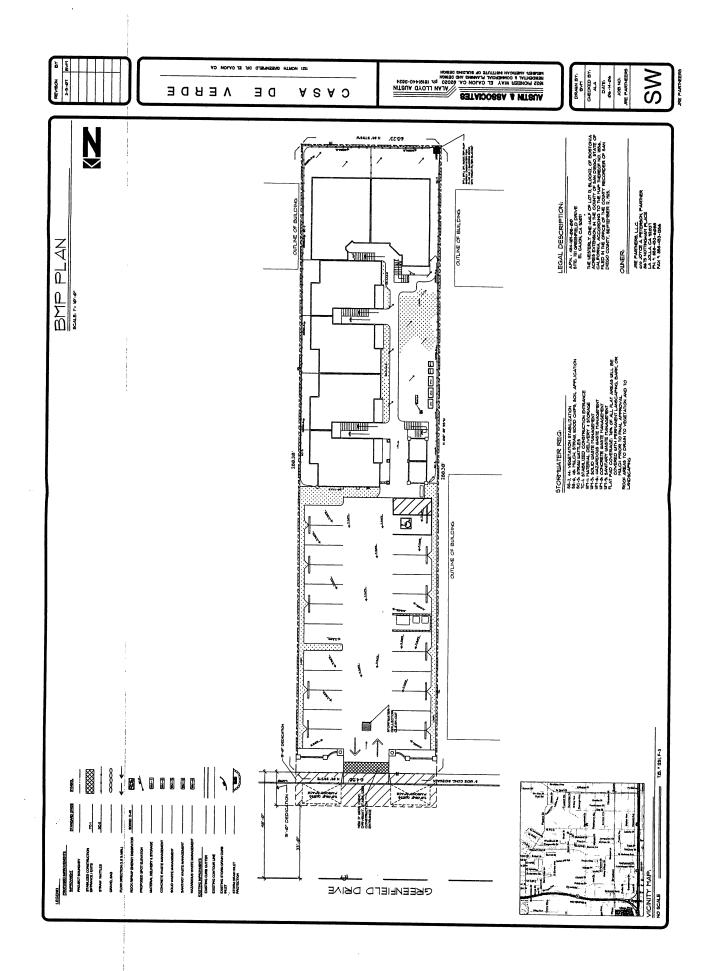
In the event that lower noise limit standards are established for construction equipment pursuant to State or Federal law, said lower limits shall be used as a basis for revising and amending the noise level limits specified in subsection (b) above.

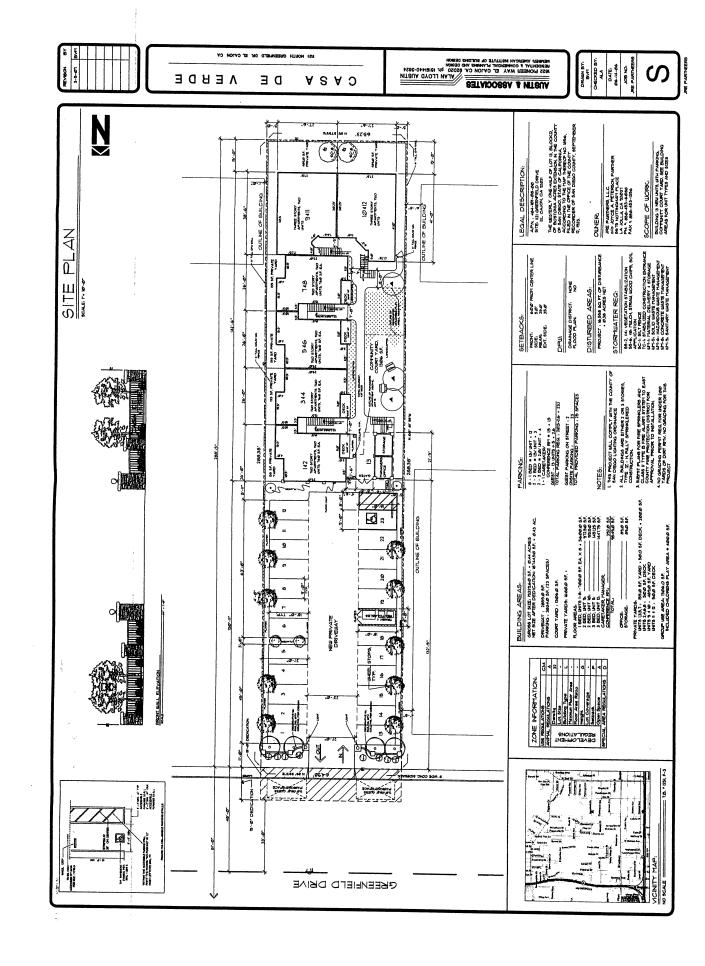
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### APPENDIX D

Excerpts of Typical Building Plan and Elevations and Cadna Log







### Cadna Log Job #A61114N2, Casa De Verde

Version 3.7.123 (32 Bit) Datei: C:\Documents and Settings\CharlesT.HELIXLM\Desktop\Joyce Peterson\Joyce Cadna Sound Power.cna Start: 14.01.08 19:19:27 Berechnungsparameter: General "Country" Germany (TA Lärm) "Max. Error (dB)" 0.00 "Max. Search Radius (m)" 2000.00 "Min. Dist Src to Rcvr" 0.00 **Partition** "Raster Factor" 0.50 "Max. Length of Section (m)" 1000.00 "Min. Length of Section (m)" 1.00 "Min. Length of Section (%)" 0.00 "Proj. Line Sources" On "Proj. Area Sources" On Ref. Time "Reference Time Day (min)" 960.00 "Reference Time Night (min)" 480.00 "Daytime Penalty (dB)" 0.00 "Recr. Time Penalty (dB)" 6.00 "Night-time Penalty (dB)" 10.00 DTM "Standard Height (m)" 0.00 "Model of Terrain" Triangulation Reflection "max. Order of Reflection" "Search Radius Src" 100.00 "Search Radius Rcvr" 100.00 "Max. Distance Source - Rcvr" 1000.00 1000.00 "Min. Distance Rvcr - Reflector" 1.00 1.00 "Min. Distance Source - Reflector" 0.10 Industrial (ISO 9613) "Lateral Diffraction" some Obj "Obst. within Area Src do not shield"On "Screening" Excl. Ground Att. over Barrier Dz with limit "Barrier Coefficients C1,2,3" 3.0 20.0 0.0 "Temperature (°C)" "rel. Humidity (%)" "Ground Absorption G" 1.00 "Wind Speed for Dir.(m/s)" 3.0

Roads (RLS-90)

```
Aircraft (AzB)
      Strictly acc. to AzB
Berechnung, Ende: 14.01.08
                              19:19:29
                                          (2 s)
Cadna/A-Berechnung
Version 3.7.123 (32 Bit)
          C:\Documents and Settings\CharlesT.HELIXLM\Desktop\Joyce
Peterson\Joyce Cadna Sound Power.cna
Start:
           14.01.08
                        19:19:27
Berechnungsparameter:
      General
      "Country"
                  Germany (TA Lärm)
      "Max. Error (dB) " 0.00
      "Max. Search Radius (m)"
                                    2000.00
      "Min. Dist Src to Rcvr" 0.00
      Partition
      "Raster Factor"
                      0.50
      "Max. Length of Section (m)" 1000.00
      "Min. Length of Section (m)" 1.00
      "Min. Length of Section (%)"
      "Proj. Line Sources"
      "Proj. Area Sources"
      Ref. Time
      "Reference Time Day (min)"
                                    960.00
      "Reference Time Night (min)"
                                    480.00
      "Daytime Penalty (dB)" 0.00
      "Recr. Time Penalty (dB)"
                                    6.00
      "Night-time Penalty (dB)"
                                    10.00
      DTM
      "Standard Height (m)"
                              0.00
      "Model of Terrain"
                              Triangulation
      Reflection
      "max. Order of Reflection"
      "Search Radius Src"
                              100.00
      "Search Radius Rcvr"
                              100.00
      "Max. Distance Source - Rcvr" 1000.00 1000.00
      "Min. Distance Rvcr - Reflector"
                                          1.00 1.00
      "Min. Distance Source - Reflector" 0.10
      Industrial (ISO 9613)
      "Lateral Diffraction"
                              some Obj
      "Obst. within Area Src do not shield"
      "Screening" Excl. Ground Att. over Barrier
      " " Dz with limit
      "Barrier Coefficients C1,2,3" 3.0 20.0 0.0
      "Temperature (°C)"
                              10
      "rel. Humidity (%)"
      "Ground Absorption G" 1.00
      "Wind Speed for Dir.(m/s)" 3.0
     Roads (RLS-90)
     Strictly acc. to RLS-90
     Railways (Schall 03)
     Strictly acc. to Schall 03 / Schall-Transrapid
```

Strictly acc. to RLS-90 Railways (Schall 03)

Strictly acc. to Schall 03 / Schall-Transrapid

### Aircraft (AzB) Strictly acc. to AzB

Berechnung, Ende: 14.01.08 19:19:29 (2 s)